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Statistical Methodology Report

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2002 STATUS OF THE ARMED FORCES SURVEY – WORKPLACE AND GENDER RELATIONS: STATISTICAL METHODOLGY REPORT

Barbara J. George and Kent R. Kroeger

Editors

Defense Manpower Data Center
Survey & Program Evaluation Division
1600 Wilson Boulevard, Suite 400, Arlington, VA 22209-2593

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2002 STATUS OF THE ARMED FORCES SURVEY—WORKPLACE AND GENDER RELATIONS: STATISTICAL METHODOLOGY REPORT

Executive Summary

This report describes the sampling design, sample selection, estimation procedures, and the missing data compensation procedures used for the *2002 Status of the Armed Forces Surveys—Workplace and Gender Relations* (WGR2002). The first section of this report presents a general overview of the survey and the sampling design. Subsequent sections provide information on the statistical methods used in weighting and variance estimation. Response rates were calculated and are described in the last section of the report.

The population of interest for WGR2002 included all active-duty Army, Navy, Marine Corps, Air Force, and Coast Guard members (*excluding* Reservists on active duty), up to and including paygrade O-6, who had at least 7 months service at the time the first questionnaire was mailed. Sample selection was from the Defense Manpower Data Center's (DMDC's) May 2001 Active Duty Master File (ADMF).

Weighting of the survey involved several steps that took into account the sample design and the response rates that were achieved in the survey. These steps were:

- Calculation of base weights
- Adjustments for unknown eligibility
- Adjustments for nonresponse among eligible sample persons
- Raking to sampling frame counts of persons at the beginning of the data collection period.

The survey was a stratified, single stage sample of active-duty members.[1] The first step in weighting was to compute a base weight, the inverse of the selection probability for each sampled member. Since the eligibility of some sampled persons could not be determined due to nonresponse, the second step was to make an adjustment to apportion the weights of the unknowns across the eligible and ineligible sample members. The third step adjusted the weights of eligible respondents to account for those who did not respond. The final step in weighting was to rake the weights to frame counts for the beginning of the data collection period.

Response rates for the WGR2002 were computed in accordance with the standards defined by the Council of American Survey Research Organizations (CASRO) . The response rates for the full sample and for subgroups and how they were computed are described in the second chapter of this report.

[1] The sampling frame is divided into subgroups called strata and a sample is selected from each stratum.

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2002 STATUS OF THE ARMED FORCES SURVEY—WORKPLACE AND GENDER RELATIONS: STATISTICAL METHODOLOGY REPORT

INTRODUCTION

This report describes the sampling design, sample selection, and weighting procedures used for the *Status of the Armed Forces Surveys—Workplace and Gender Relations,* referred to in this report as WGR2002. The first chapter of this report presents a general overview of the survey and the sampling design. The second chapter provides information on the statistical methods used in weighting and variance estimation. Response rates are given in the second chapter.

WGR2002 is the third study conducted in the Department of Defense (DoD) of sexual harassment and other unprofessional gender-related behaviors. The Defense Manpower Data Center (DMDC) conducted the first Joint-Service, active-duty sexual harassment survey in 1988-89 (Martindale, 1990). In 1994-95, DMDC updated and re-administered the survey (*Department of Defense 1995 Sexual Harassment Survey* [CD-ROM]; 1996). Three survey forms (*Forms A*, *B*, and *C*) were used in the 1995 study. *Form A* replicated the 1988-89 DoD-wide survey that produced the initial baseline data on sexual harassment in the active-duty Services. The purpose of administering the *Form A* survey was to permit comparisons of the incidence of sexual harassment in the 1988 and 1995 time frames. Because considerable advances in understanding and measuring sexual harassment had taken place since 1988, these developments were incorporated in the design of the *Form B*, administered concurrently with the *Form A* replication (Bastian, Lancaster, & Reyst, 1996).

The 1995 *Form B* differed from the 1988 survey (and the 1995 *Form A*) in three major ways. It provided: (1) an expanded list of potential harassment behaviors that survey respondents could report; (2) an opportunity, for the first time, to report on experiences that occurred outside normal duty hours, not at work, and off the base, ship, or installation; and, (3) measures of service members' perceptions of complaint processing, reprisal, and training. Survey items measuring sexual harassment in 1995 *Form B* were largely based on work by Fitzgerald and were modeled after the *Sexual Experiences Questionnaire (SEQ)* developed by Fitzgerald, et al. (1988) The *SEQ* is widely used and is generally considered the best instrument available for assessing sexual harassment experiences (Arvey & Cavanaugh, 1995).

The WGR2002 survey incorporated further psychometric and theoretical advances in sexual harassment research, plus it includes workplace discrimination questions. As in the 1995 *Form B* survey, based on the *SEQ*, it assesses:

- what elements of the active-duty military population had unwanted, gender-related experiences;
- the context, location, and circumstances under which such experiences occurred;

- the extent to which these experiences were reported and, if reported, members' satisfaction with the complaint process and response;

- the extent to which those attempting to report harassment experienced reprisal;

- the amount of training on sexual harassment and members' assessment of the effectiveness of training received;

- service members' views of current policies designed to prevent, reduce, or eliminate sexual harassment, of leadership commitment, and of progress in reducing the incidence of sexual harassment.

Despite the similarities between the gender-related questions of 1995 and 2002 questionnaires, there also are differences. One difference is the addition of items on gender discrimination. Another difference is in the measurement of sexual harassment.

The need for a different approach to measuring sexual harassment became apparent in 1996 when results from the 1995 DoD-wide sexual harassment survey were released. At that time, senior OSD officials learned there was not a standardized sexual harassment measure across the Services and OSD. The Deputy Assistant Secretary of Defense (Equal Opportunity) subsequently tasked DMDC and the Services to develop a standardized approach for both DoD-wide and Service-specific surveys to measure sexual harassment. Two issues were involved in standardization: (1) what survey items (called the "DoD Core Measure of Sexual Harassment") should be used to measure sexual harassment and (2) how to "count" those who have experienced sexual harassment and report results.

With regard to development of the "core measure," the Services requested that the behavioral list used on the 1995 DoD-wide survey be shortened. To do so, a variety of approaches were empirically tested using the 1995 survey dataset. Based on these analyses, DMDC and the Services agreed on the new core measure, which was implemented in the WGR2002.

Methodological Overview

Comparison of Forms and Procedures: 1995 Versus 1988

In addition to the item differences between 1995 and 1988 approaches, several methodological differences result largely from a need to use similar methods across the 1995 forms. Major differences from 1988 were identified by Edwards et al. (1997):

- All 1995 forms used optical-mark-read formatting rather than the printed, key-entry format of the 1988 form. Also, *Form B* was printed in color (rather than black and white) and included highly detailed versions of the Service logos on the front cover.

- All 1995 forms contained the standardized set of demographic questions (e.g., race/ethnicity and marital status) currently employed in DoD-wide surveys. Some of the demographic questions and response alternatives were slightly different across the 1988 and 1995 administrations.

- Admirals and generals (paygrades O7 and above) were included only in the 1988 sample.

- The 1995 sample included members with missing values on stratification variables (e.g., for gender and paygrade) and unit addresses. The 1988 sample included only members who had complete data on the stratifying variables and the unit address.

- In 1995, the order of preference for sending a survey was home address, unit (i.e., work) address, and as a last resort, one or more home addresses supplied by a credit-reporting firm. In 1988, all surveys were sent to unit addresses.

- To enhance response rates, the 1995 survey used up to five different contact attempts: a notification letter, an initial survey, a reminder/thank-you letter, and two follow-up survey mailings. In contrast, the 1988 survey used only one survey mailing and a follow-up letter.

- A telephone help line was used only in 1988.

- Respondents returned completed 1995 surveys directly to a commercial mailing/ scanning firm. The completed 1988 forms were returned to DMDC which then sent them to a key-entry firm.

Comparison of Forms and Procedures: 2002 Versus 1995

The sexual harassment measure in WGR2002 largely replicates the measure in the 1995 *Form B*. Only a few methodological differences are found in the 2002 versus 1995 approaches. Many of the differences were the result of introducing a Web option:

- All 1995 forms used pencil-only optical-mark-read formatting rather than the pen or pencil intelligent character-read format used in 2002. The use of this approach along with the Web version in 2002 required different editing rules for item(s) that respondents answered that they should have skipped.

- Some of the demographic questions and response alternatives were different across the 1995 and 2002 administrations.

- Members of the Reserve components on active duty (AGR/TAR; Title 10 and Title 32) were included with all others on active duty in the 1995 *Form B* sample. These Reserve component members were not sampled for WGR2002.

- The core measure of sexual harassment was shortened from 25 behavioral items in 1995 to 19 in 2002.

SAMPLE DESIGN FOR THE 2002 STATUS OF THE ARMED FORCES SURVEY—WORKPLACE AND GENDER RELATIONS

Timothy W. Elig
Defense Manpower Data Center

This section of the report describes:

- the inferential requirements for the survey, including the population definition, key reporting domains or subpopulations defined within the overall population, and the precision requirements imposed on sample estimates of parameters describing the key domains;
- the construction and stratification of the sampling frame;
- the procedure followed to determine the sample size and allocation; and
- selection of the sample.

A distinction is made between *sample size* and *number of respondents*. Sample size refers to the number of persons selected into the sample (from the population of interest). Sample sizes are determined to provide a specified number of respondents given the anticipated eligibility and response rates for the survey. The sample is the group of persons to whom a questionnaire is to be administered. Number of respondents, on the other hand, refers to the number of persons eligible to participate in the survey who returned a questionnaire with key items completed.

A distinction is also made between *strata* and *domains*. Stratification is a feature of the sampling design used to control the distribution of the sample. Strata partition the population in the mathematical sense. That is, each individual in the population is classified into one and only one stratum, and the set of all strata comprise the entire population. By contrast, a single individual may simultaneously belong to one or more domains, which are groupings of sample members to be reported about. The set of all domains, as a consequence, does not partition the population and is itself arbitrary, depending largely on the study requirements and the interests of the investigators. *Key domains* are identified during the planning of the survey to provide the basis for determining the sample size and allocation.

Overview of the Sample Design

A single-stage, stratified random sampling design was used for WGR2002. Source information for constructing the sampling frame and identifying key domains for WGR2002 consisted of 1,390,968 records from the Defense Manpower Data Center's (DMDC's) May 2001 Active Duty Master File (ADMF). Within each stratum, persons were sampled with equal conditional probabilities and without replacement. Minimum-cost stratum level sample sizes were determined by imposing variance constraints on key parameter estimates of the proportion of persons belonging to specified domains (Kavee and Mason, 1997).

Inferential Requirements

The inferential requirements for a survey are described in terms of

- a fully operational definition of the population of inferential interest (i.e., the target population),
- key parameters used in developing the design, and
- the precision requirements for the survey, stated in terms of the maximum values of the variances to be associated with the sample estimates of the key parameters.

The population definition identifies all individuals for whom conclusions are to be reached or about whom inferences are to be made based on the survey data.

Key parameters used as the basis for the design may be defined in terms of characteristics of the overall population, characteristics of subpopulations of special interest (key domains), tests of hypotheses (including standardized comparisons), and the relations that exist at population levels among specified observation variables. For this survey, the key parameters were prevalence rates, defined as the proportion of persons belonging to specified domains expected to report having the various attitudes and experiences measured on the survey.

The precision requirements were defined in terms of the expected maximum *confidence interval half-widths* to be associated with *a priori* estimates of, for example, 50% prevalence rates.

Population Definition

The population of interest for the WGR2002 survey consists of all active-duty armed forces personnel up to and including paygrade O-6 in the Army, Navy, Marine Corps, Air Force, and Coast Guard, excluding AGR/TARs program members of the National Guard and Reserves. The population of interest is further limited to active-duty Service members with at least six months service at the time the first questionnaire was mailed. The survey was worldwide in scope and included active-duty individuals below flag rank in the countable strength in the May 2001 ADMF. Final eligibility was limited to those 1) also in the December 2001 ADMF *and* 2) who were also in the September 2001 DEERS Medical PIT[2] file. Sampled persons were flagged as ineligible (6.45% of the sample) and were excluded from all survey mailings, if they were either not in the ADMF (1,969) or were ineligible for benefits in the Medical PIT file (1,925).

[2] DEERS is the Defense Enrollment Eligibility Reporting System which has a dynamic database used to verify eligibility for medical and other benefits. The Medical Point in Time (PIT) file is an extract that freezes the contents of the database at particular points in time.

Stratification of the Sample

A distinction is made between *dimensions of stratification* and *levels of stratification*. The dimensions are the variables used to stratify the sample/population, whereas the levels are the values within a dimension.

A sample can be optimally designed for reporting domains that can be defined as sets of one or more strata. Variables were selected as dimensions of stratification, therefore, because they could also be used to define domains of the most analytical interest. As discussed below, there are reasonable limits on how small strata should be.

The following five dimensions of stratification (and their levels) were used to define strata for the WGR2002 sample:

- Service of the member: Army, Navy, Marine Corps, Air Force, and Coast Guard
- Gender: Male and female
- Paygrade: Enlisted E1-E3, E4, E5-E6, E7-E9, warrant officers W1-W5, and commissioned officers O1-O3, and O4-O6
- Racial/ethnic group: Minority and nonminority
- Occupational PERSTEMPO groups: High (2.59-4.86 months) and low (.321-2.58 months)

The first four variables were also used for stratification for the 1995 *Form B*. Compared to 1995, the 2002 stratification uses fewer levels for racial/ethnic group and more levels for paygrade. Location was used for the 1995 stratification but was not used for 2002. Component was also used for 1995 but is not relevant to this survey since it is limited to active-duty members. In analyses of the 1995 data, paygrade was found to be most strongly related to response rates and to how people respond to the survey; race/ethnicity and location were only weakly related (Bastian et al., 1996; Mason et al, 1996).

The fifth dimension of stratification, Occupational PERSTEMPO group, was added to control for the response propensity associated with deployments. Riemer and Randolph (2001) reported that deployed members had lower response rates on both paper- and Web-based surveys, including a pretest of WGR2002. This association can be captured partially by

grouping together members in those occupations with high and low average PERSTEMPO, a proxy measure of deployment.[3]

As a starting point, candidate strata were constructed by crossing all of the levels of the stratification variables, adding a stratum for *unknowns*,[4] yielding 270 initial strata for WGR2002.[5] The next step was to consider the minimum stratum size consistent with the potential total sample size. A minimum of two observations is needed in any stratum for variance estimation. However, if a stratum is too small, then insisting on at least two observations from that stratum introduces an unequal weighting effect that acts to increase variances for no reason other than the stratum is simply too small. Even if only a few strata are too small, the cumulative unequal weighting effects can compromise any variance advantage associated with having stratified in the first place.

This consideration leads to defining "too small" in terms of a proportional allocation of the total sample.[6] Given a proportional allocation and a minimum requirement of two observations per stratum, the minimum stratum size was computed as,

$$\min\{N_h\} = \frac{2N}{n},$$

where,

N_h = the size of the h-th stratum,

N = the size of the sampling frame, and,

n = the total size of the sample.

WGR2002 had N = 1,390,968 and $n = 55{,}000$, yielding a minimum stratum size of $\min\{N_h\} = 50.6$.

Final sampling strata were constructed by collapsing "too-small" initial strata. Collapsing focused on levels of stratification judged least important for analytical needs. For

[3] For each occupational group, the average number of months over a 24-month period (October 1996-September 1998) that members were considered deployed was used to construct the proxy. The proxy measure flags a member as *deployed* if the unit had at least 10 members, at least 30% of the members had families, and at least 60% of the members with families had received Family Separation Allowance (FSA) or Hostile Fire Pay (HFP) that month. Admittedly, this definition of deployment has limitations: (a) it is possible that members in deployed units comprised primarily of junior enlisted will be incorrectly identified as not being deployed (because junior enlisted are less likely than others to be married, such units may not meet the criterion that at least 30% of members must have families); (b) sub-unit deployment, which is usual, for example, for the Air Force, is not captured; and (c) FSA is paid for separations of 30 days or more and thus does not reflect separations of fewer than 30 days. Therefore, it is likely that the months of deployment is an underestimate.

[4] An *unknown* stratum was created containing all individuals for whom one or more dimensions of stratification was missing level information. This unknown category is required for the Sample Planning Tool used in the allocation process.

[5] Note that certain combinations do not exist, for example there are no warrant officers in the Air Force.

[6] A proportional allocation of the sample does not, by definition, introduce unequal weighting effects.

WGR2002, two strata had to be collapsed on occupational groups, ten strata on minority status, and eight strata on both occupational groups and minority status. The final strata definitions are listed in Appendix A, Table A-1. A total of 249 strata were constructed for WGR2002, including an "unknown" stratum containing records for which one or more of the stratum dimensions was missing from the level information.

Reporting Domains

Factors used to define the key reporting domains are listed in Table 1. Domains were generated by considering crosses among these factors to develop domain definitions consistent with the objectives of the survey and the resources available to carry out the survey.

Precision Requirements

In general, precision requirements are specified in terms of the maximum expected values of the variances for key domain estimates. The sampling variances are functions of the sample size, sample distribution, population variances, and design prevalences.[7] A uniform prevalence rate of 0.50 was used to design the WGR2002 sample. In contrast, a less restrictive rate of 0.30 was used for men in the 1995 survey design, which resulted in fewer men than women being sampled for 1995 *Form B*.

For this survey, the maximum variances expected for particular sample results (estimates) were specified in terms of 95% confidence interval half-widths, or margins of error.[8] Both the cost implications and the objectives of the survey were considered in specifying these values. Appendix A, Table A-2 lists the half-width confidence interval set as precision requirements together with domain definitions and the estimated eligible population size for each domain.

Domains and their associated precision constraints were defined to allow separate in-depth analysis for men and for women in the overall active-duty population as well as for smaller domains also segregated by gender. The survey precision requirements were set for domains to facilitate analyses both at the Armed forces level and within the Services.

[7] Prevalence rates are the proportion of persons belonging to specified domains who would report having the various attitudes and experiences measured on the survey.

[8] M*argins of error*, such as those reported for opinion polls, are expressed as a plus or minus figures. The *confidence level*, typically 95%, represents the probability that the true population value is covered by the confidence interval in repeated samples.

Table 1.
Factors Defining Key Reporting Domains

Variable	Categories
Service*	• Army • Navy • Marine Corps • Air Force • Coast Guard
Sex*	• Male • Female
Paygrade Group 1*	• E1-E3 • E4 • E5-E6 • E7-E9 • W1-W5 • O1-O3 • O4-O6
Race/ethnic Category 2*	• Minority • Non-minority
Occupation PERSTEMPO*	• High • Low
Paygrade Group 2	• E1-E9 • W1-W5 • O1-O6
Paygrade Group 3	• E1-E3 • E4-E5 • E6-E9 • W1-W5 • O1-O3 • O4-O6
Paygrade Group 4	• E1-E3 • E4 • E5-E6 • E7-E9 • All officers
CinCs	• America • Europe • Pacific • Central • South

Table 1. (continued)

Variable	Categories
CONUS	• CONUS (all 48 contiguous states and the District of Columbia) • OCONUS (non contiguous states, territories and countries)
Regions	• US & US territories • Europe • Asia & Pacific Islands • Other
Regions-collapsed	• US & US territories, Other, Unknown • Europe • Asia & Pacific Islands
Race Code	• White • Asian & Pacific Islander • Black • Native American & Alaska Native • Other
Race/Ethnic Code	• Native American & Alaska Native • Asian & Pacific Islander • (Non-Hispanic) Black • (Non-Hispanic) White • Hispanic • Other

* Stratification variables.

Sample Size and Allocation

After the strata and domains were constructed, the total sample size and its allocation to the sampling strata were determined. The DMDC Sampling Tool Version 2.0 (Kavee & Mason, 2000) was used to allocate the (without replacement) sample so that the precision requirements were met, in expectation, for the different reporting domains. This software is designed to produce optimal sample designs for stratified, equal probability samples for a specified cost model. The cost model used is described by Wheeless, Mason, and Kavee (1997). Response and eligibility rates for WGR2002 were estimated from the 1995 *Form B*.

Appendix A, Table A-2 shows the solutions for the domains from the final sample design for WGR2002. The *Lagrange Ratios* identify those variance constraints that drove the solution, and thus the size (cost) of the survey. Ratios closest to 100 have the greatest impact; the smaller the ratio the smaller the impact on the final design. Precision constraints with no impact on the solution have a zero ratio (indicated by a blank in the table)—these are domains for which the expected precision will meet the precision requirement, if there is one imposed, as a result of

meeting other more difficult-to-achieve constraints. Table A-2 shows the precision expected to be achieved from the design if the response rates used in the design are correct.[9]

The expected design effects shown in Appendix Table A-2 are the ratios of the variance expected from the design compared to the variances that would be achieved by a simple random sample. The overall design effect is 1.93.

[9] Precision can only be given in expectation for domains that do not exactly align with a strata or stratum since persons meeting the domain definition would be selected at random into such a stratum or strata.

WEIGHTING FOR THE 2002 STATUS OF ARMED FORCES SURVEY--WORKPLACE AND GENDER RELATIONS

Ismael Flores-Cervantes, Richard Valliant,
Lee Harding, and Bridgett Bell
Westat

This chapter describes the weighting and estimation procedures for the WGR2002. The first step in weighting is to compute a base weight, which is the inverse of the selection probability for each initially sampled person. Since the eligibility of some persons cannot be determined due to nonresponse, the second step is to make an adjustment to apportion the weights of the members with unknown eligibility among both the known eligible and ineligible respondents in the sample. The third step adjusts the weights of eligible respondents to account for those who did not respond. The final step in weighting is to rake weights to frame counts made at the beginning of the data collection period. This final step compensates for some changes in the population that occur between the time of sample selection and data collection.

Response rates for the WGR2002 have also been computed in accordance with the standards defined by the Council of American Survey Research Organizations (CASRO, 1982). The response rates for the full sample and for subgroups and how they are computed are described in the last section of this report.

Assigning Disposition Codes

Each person in the survey was assigned a disposition code indicating whether the person was an eligible respondent, an eligible nonrespondent, an ineligible, or a person whose eligibility status was unknown. These codes were a key input in weighting and in the computation of response rates, discussed in later sections. The assignment of disposition codes drew upon information contained in a number of sources. The assignment was a sequential process that used the following variables created during the processes of data collection and weighting:

- F_ELIG—frame eligibility as of December 2001 (beginning of the data collection period);
- FLAG_FIN—Survey Control System Disposition code; and
- COMPFLAG—Completed questionnaire indicator.

The creation of these variables is described in the following sections. The process for assigning the disposition codes is also described below. In general, for each sampled member, the first step was to determine if the member's eligibility was known. Members whose eligibility status was known were classified as *eligible* or *ineligible*. For eligible members, the next step was to determine whether the questionnaire was *complete* or *incomplete*. The procedure for deriving the eligibility for each sample person (ELIG_R) involved several steps that are described in the following sections.

Frame Eligibility

Westat created the variable F_ELIG to indicate the frame eligibility of the member as of December 2001 (beginning of the data collection period). This variable reflects the eligibility of the member using the information from the September 2001 Defense Enrollment Eligibility Reporting System (DEERS) and the December 2001 Active Duty Master File (ADMF). The variable F_ELIG was created for all the records in the May 2001 sampling frame using the following variables:

- INDEERS (the September 2001 DEERS file indicator). The variable INDEERS was created using the variable ELIG found in the May 2001 sample frame. The variable INDEERS recodes the values of the variable ELIG to facilitate the creation of F_ELIG. DMDC created the variable ELIG by merging the records from the September DEERS file to the May frame. Table 2 shows the relationship between the variables INDEERS and ELIG; and

- INDEC (In December 2001 ADMF indicator). The variable INDEC was created by Westat by merging the May 2001 sampling frame with the December 2001 ADMF frame. DMDC provided the December ADMF restricted to members present in the May frame who were still eligible in December 2001. Table 3 shows the tabulation of the flags for records in the May frame (INMAY) and in the December frame (INDEC).

Table 2.
Creation of the Variable INDEERS

INDEERS	ELIG	Total Members	Percentage	Description
1	A, R	1,301,813	93.59	Active Duty Eligible in September 2001 DEERS
2		89,122	6.41	Not in September 2001 DEERS
Total		1,390,935	100.00	

Table 3.
Tabulation of the Indicators for Members Present in the May Sampling Frame (INMAY) and the December ADMF Frame (INDEC)

INMAY	INDEC	Total Members	Percentage	Description
1	1	1,272,917	91.5	Member in May and December Frames
1	2	118,018	8.5	Member in May and not in the December Frame
Total		1,390,935	100.0	

Table 4 shows how the variable F_ELIG was created. A member was eligible for the survey if he/she was eligible in the May sampling frame (INMAY=1), eligible in the September DEERS file (INDEERS=1), and eligible in the December ADMF frame (INDEC=1). As indicated in the table, the DEERS file identifies an additional 14,910 members in the frame (1.07 percent) as ineligibles. After merging the files, 132,928 (9.56 percent) members were classified as frame ineligibles (F_ELIG=2).

Table 4.
Frame Eligibility (F_ELIG) for Members in the May 2001 ADMF Sample Frame

F_ELIG	INMAY	INDEERS	INDEC	Total Members	Percentage
1-Eligible	1	1	1	1,258,007	90.44
2-Ineligible	1	2	1	14,910	1.07
2-Ineligible	1	1	2	43,806	3.15
2-Ineligible	1	2	2	74,212	5.34
Total				1,390,935	100.00

Table 5 includes a variable (INSMP) that partitions the sampled members in the frame into sampled and not sampled. As indicated in the table, there are 623+2,009+3,271= 5,903 sampled members (9.77% of the sample) classified as frame ineligibles (F_ELIG=2).

Table 5.
Members in the Sample (INSMP=1)

INSMP	F_ELIG	INMAY	INDEC	INDEERS	Total Members	Percentage
0	1	1	1	1	1,203,495	86.52
0	2	1	1	2	14,287	1.03
0	2	1	2	1	41,797	3.00
0	2	1	2	2	70,941	5.10
1	1	1	1	1	54,512	3.92
1	2	1	1	2	623	0.04
1	2	1	2	1	2,009	0.14
1	2	1	2	2	3,271	0.24
Total Military Members, May 2001 Sampling Frame					1,390,935	100.00

Survey Control System Disposition

The Survey Control System contains a variable with the disposition code (FLAG_FIN) of each mailed survey as determined during data collection. During data collection, returns received were assigned a code based on whether they were eligible respondents, ineligibles, refusals, blank returns, returns, no-returns, and postal non-deliveries. Table 6 shows the number of sample cases and descriptions of FLAG_FIN found in the sample.

Table 6.
Description of the Survey Control System Disposition Codes (FLAG_FIN) Used in WGR2002 Survey

FLAG_FIN	Descriptions	Sample Cases	% Sample Cases	Sum of Base Weights	% Sum of Base Weights
1	Returned survey - a non-blank survey was returned with no additional information	21,056	34.85	480,262	34.53
2	Return (deceased) – a non-blank survey was returned with additional information that the sample member was deceased	0	0.00	0	0.00
3	Return (incarcerated) – a non-blank survey was returned with additional information that the sample member was incarcerated	0	0.00	0	0.00
6	Return (separated/retired) – a non-blank survey was returned with additional information that the sample member had separated/retired	26	0.04	576	0.04
7	Return (deployed) – a non-blank survey was returned with additional information that the sample member was deployed	15	0.02	478	0.03
8	Return (all other reasons) – a non-blank survey was returned with a reason other than that the sample member was deceased, incarcerated, separated/retired, deployed	15	0.02	327	0.02
9	Returned Blank (deceased) – a blank survey was returned with information that the sample member was deceased	0	0.00	0	0.00
10	Returned Blank (incarcerated) – a blank survey was returned with information that the sample member was incarcerated	0	0.00	0	0.00
13	Returned Blank (separated/retired) – a blank survey was returned with information that the sample member had separated/retired	31	0.05	640	0.05
14	Returned Blank (active refusal) – a blank survey was returned, sample member refused to take part in the survey	10	0.02	97	0.01

Table 6. (continued)

FLAG_FIN	Descriptions	Sample Cases	% Sample Cases	Sum of Base Weights	% Sum of Base Weights
15	Returned Blank (deployed) – a blank survey was returned with information that the sample member was deployed	12	0.02	435	0.03
16	Returned Blank (all other reasons for returning blank) – a blank survey was returned with information other than that the sample member was deceased, incarcerated, separated/retired, deployed	24	0.04	510	0.04
17	Returned Blank (no reason) – a blank survey was returned and no reason was given by sample member	46	0.08	901	0.06
18	No Return (deceased) – survey was not returned, sample member deceased	3	0.00	90	0.01
19	No Return (incarcerated) – survey was not returned, sample member was incarcerated	0	0.00	0	0.00
22	No Return (separated/retired) – survey was not returned, sample member had separated/retired	54	0.09	793	0.06
23	No Return (active refusal) – survey was not returned, sample member refused to take part in the survey but did not identify self as deployed, incarcerated, separated/retired	8	0.01	182	0.01
24	No Return (deployed) – survey was not returned, sample member unreached at UNIT address because of deployment	69	0.11	2,419	0.17
25	No Return (all other reasons) – survey was not returned, sample member was not an active refuser, gave a reason for nonresponse other than being deceased, incarcerated, separated/retired, deployed	20	0.03	527	0.04
26	No Return (no reason) – survey was not returned, no reason was given by sample member	33,683	55.75	778,759	55.99

Table 6. (continued)

FLAG_FIN	Descriptions	Sample Cases	% Sample Cases	Sum of Base Weights	% Sum of Base Weights
27	PND (no address remaining) – all addresses were attempted-returned PND	1,338	2.21	35,855	2.58
28	PND (address remaining at the close of field) – at the close of field the last address used was found invalid, next available was not attempted	104	0.17	2,767	0.20
29	Original Non-Locatable (no address as start of mailing) – substantially incomplete or blank address field prior to the start of the administration of the survey, no mailings attempted	7	0.01	189	0.01
30	Original ineligible as identified by DMDC	3,894	6.45	85,128	6.12
	Grand total	60,415	100.00	1,390,935	100.00

Note. Some codes in the table will also be used in a subsequent survey of spouses of military members. Spouses were not sampled as part of WGR2002.

Completed Questionnaire

The variable that indicates whether a questionnaire was completed (COMPFLAG) was provided to Westat by DMDC and is shown in Table 7 along with the corresponding percentages. A questionnaire is considered complete if 50 percent or more of the survey questions were answered and at least one item in question 55 (key question) was answered.

Table 7.
Complete Questionnaires (COMPFLAG)

COMPFLAG	Sample Cases	% Sample Cases	Sum of Base Weights	% Sum of Base Weights
.B– Blank/No Survey	39,180	64.85	906,709	65.19
0 – Incomplete	1,034	1.71	24,055	1.73
1 – Complete	20,201	33.44	460,171	33.08
Total	60,415	100.00	1,390,935	100.00

Final Disposition Codes

The method of assigning final disposition codes was a sequential process that used the variables described in the previous sections. After the code assignment, each combination was checked for inconsistencies.

Table 8 lists the various combinations of the variables F_ELIG, FLAG_FIN, and COMPFLAG that occurred in WGR2002. Based on these three variables, a new variable denoted as ELIG_R was created with the following categories:

- *ER* — Eligible respondents. This group consists of all eligible members who participated in the survey and provided substantially complete and usable survey data.

- *ENR* — Eligible nonrespondents. This group consists of all sampled members who are known to be eligible for the survey, but did not provide substantially complete and usable survey data.

- *IN_FR* — Ineligibles or out-of-scope as determined by the September DEERS file (INDEERS=1) and the updated December ADMF frame (INDEC=1). This group consists of all sampled persons determined to be ineligible because they were not part of either the September DEERS file or the December frame (F_ELIG=2).

- *IN_PR* — Ineligibles as determined by FLAG_FIN= 2, 3, 6, 9, 10, 13, 18, 19, and 22. These are persons who were reported by themselves (or by their proxies) as not being on active duty or as being ineligible for some other reason based on information provided at the time of data collection.

- *UNK* — Other nonrespondents whose eligibility is unknown. This group consists of all the nonresponding persons for whom eligibility for the survey could not be determined, for example, postal non-deliveries or other non-locatables.

When assigning the disposition codes, it was assumed that all members who returned the questionnaire were eligible unless they indicated otherwise. In particular, members with values of FLAG_FIN = 15, 16, 17, 24, and 25 were coded as *eligible nonrespondents* (*ENR)*. This group includes all blank and non-blank returns with reasons other than that the member was deceased, incarcerated, separated, retired, or deployed. This assumption is consistent with the assignment of disposition codes in the *1999 Survey of Active Duty Personnel (ADS) Form B (Spouses)* and the *2000 Survey of Reserve Component Personnel (RCS) Forms M* and *S*. This is different from the assignment in the *1999 ADS Form A*, where such cases were coded as *unknown eligibles* (*UNK)*. The assumption made in the *1999 ADS Form A* was that members were eligible only if they explicitly stated that they were.

Tables 8 and 9 provide counts of cases and sums of base weights for each combination of the variables used for determining eligibility. The variable ELIG_R was derived from the others as specified in Figure 1.

Table 8.
Combinations of Variables Used to Determine Disposition Codes for the WGR2002 Survey

Row	Eligibility (ELIG_R)	Frame Eligibility (F_ELIG)	Survey Control System Disposition Code (FLAG_FIN)	Complete Questionnaire (COMPFLAG)	Sample Cases	Sum of Base Weights
Eligible Respondents						
1	*ER*	1	1 Returned Survey	1	19,942	454,549
2	*ER*	1	7 Return (deployed)	1	14	422
3	*ER*	1	8 Return (all other reasons)	1	4	71
Eligible Nonrespondents						
4	*ENR*	1	1 Returned Survey	0	844	20,241
5	*ENR*	1	7 Return (deployed)	0	1	56
6	*ENR*	1	8 Return (all other reasons)	0	11	256
7	*ENR*	1	14 Returned Blank (active refusal)	0	10	97
8	*ENR*	1	15 Returned Blank (deployed)	0	12	435
9	*ENR*	1	16 Returned Blank (all other reasons)	0	22	501
10	*ENR*	1	17 Returned Blank (no reason)	0	42	851
11	*ENR*	1	23 No Return (active refusal)	.B	7	174
12	*ENR*	1	24 No Return (deployed)	.B	69	2,419
13	*ENR*	1	25 No Return (all other reasons)	.B	19	479
Ineligible as Reported by Proxy						
14	*IN_PR*	1	6 Return (separated/retired)	0	5	82
15	*IN_PR*	1	6 Return (separated/retired)	1	1	27
16	*IN_PR*	1	13 Returned Blank (separated/retired)	0	9	141
17	*IN_PR*	1	18 No Return (deceased)	.B	1	31
18	*IN_PR*	1	22 No Return (separated/retired)	.B	6	48
Ineligible as Reported by the Frame						
19	*IN_FR*	2	1 Returned Survey	0	30	369
20	*IN_FR*	2	1 Returned Survey	1	240	5,102
21	*IN_FR*	2	6 Return (separated/retired)	0	20	467
22	*IN_FR*	2	13 Returned Blank (separated/retired)	0	22	499
23	*IN_FR*	2	16 Returned Blank (all other reasons)	0	2	9
24	*IN_FR*	2	17 Returned Blank (no reason)	0	4	50
25	*IN_FR*	2	18 No Return (deceased)	.B	2	59
26	*IN_FR*	2	22 No Return (separated/retired)	.B	48	745
27	*IN_FR*	2	23 No Return (active refusal)	.B	1	8
28	*IN_FR*	2	25 No Return (all other reasons)	.B	1	48

Table 8. (continued)

Row	Eligibility (ELIG_R)	Frame Eligibility (F_ELIG)	Survey Control System Disposition Code (FLAG_FIN)	Complete Questionnaire (COMPFLAG)	Sample Cases	Sum of Base Weights
29	*IN_FR*	2	26 No Return (no reason)	.B	1,510	33,556
30	*IN_FR*	2	27 Postal Non-Deliverable (PND) (no address remaining)	.B	127	3,036
31	*IN_FR*	2	28 Postal Non-Deliverable (PND) (address remaining)	.B	2	10
32	*IN_FR*	2	30 Original ineligible as identified by DMDC	.B	3,894	85,128
Unknowns						
33	*UNK*	1	26 No Return (no reason)	.B	32,173	745,202
34	*UNK*	1	27 Postal Non-Deliverable (PND) (no address remaining)	.B	1,211	32,819
35	*UNK*	1	28 Postal Non-Deliverable (PND) (address remaining)	.B	102	2,757
36	*UNK*	1	29 Original Non-Locatable	.B	7	189
Total					60,415	1,390,935

Note. Sum of base weights across rows do not equal 1,390, 935 due to rounding..

Table 9.
Eligibility (ELIG_R)

ELIG_R	Sample Cases	% Sample Cases	Sum of Base Weights	% Sum of Base Weights
ER (Eligible Respondents)	19,960	33.04	455,042	32.71
ENR (Eligible Nonrespondents)	1,037	1.72	25,508	1.83
IN_FR (Ineligibles as Determined by the Updated Frame and DEERS)	5,903	9.77	129,087	9.28
IN_PR (Proxy reported ineligibles)	22	0.04	330	0.02
UNK (Unknown Eligibility)	33,493	55.44	780,968	56.15
Total	60,415	100.00	1,390,935	100.00

Figure 1.
Sequential Assignment of WGR2002 Disposition Codes (ELIG_R)

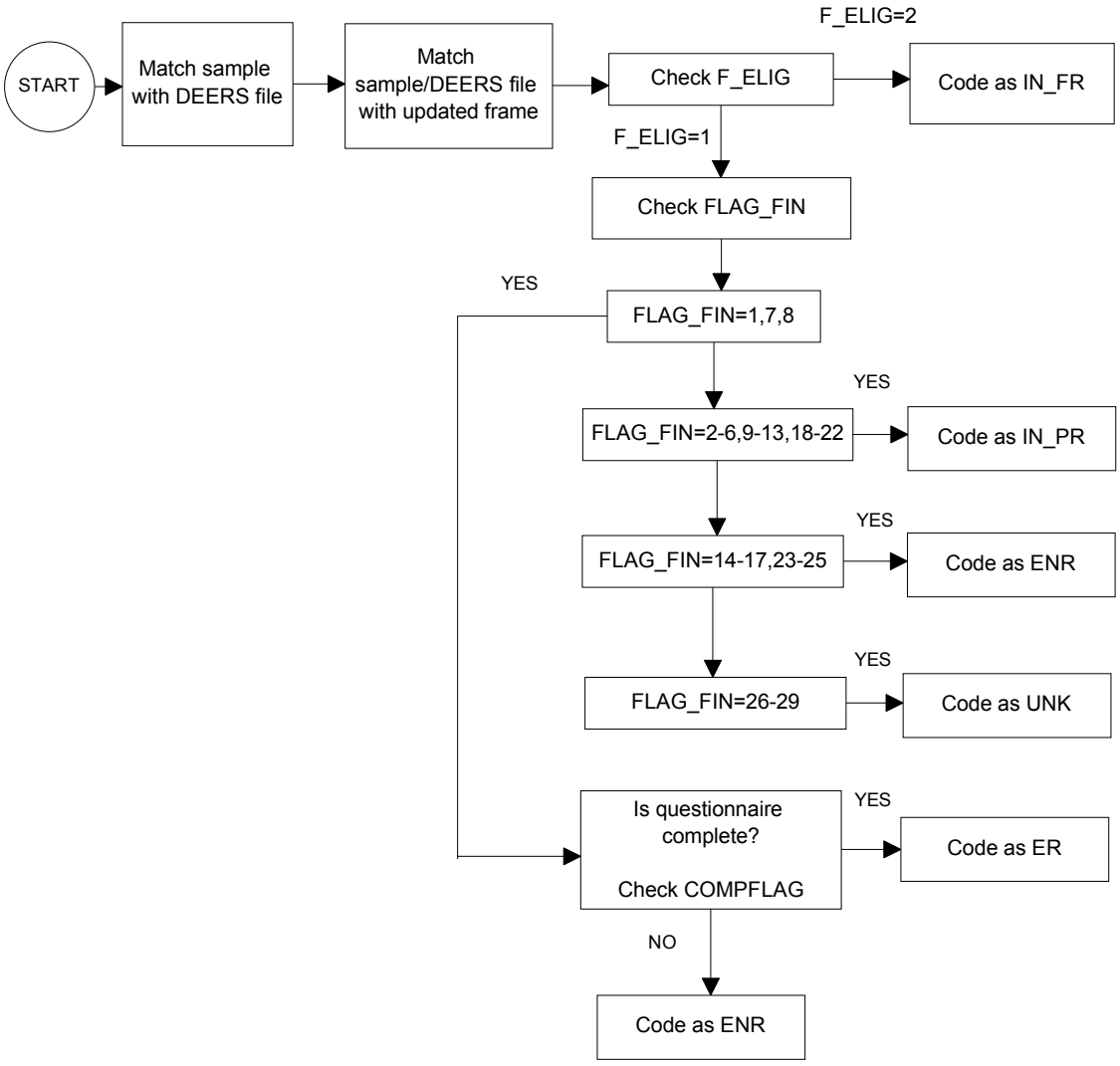

Figure 1 is a general flowchart showing how the disposition code ELIG_R was created. First, the sample was matched against the DEERS file and the December frame. Sampled cases that did not match the DEERS or the December frame were coded IN_FR. Then, the variable FLAG_FIN, the Survey Control System (SCS) code, was used to split the sample into returns and non-returns. Non-returns were classified as eligible nonrespondents (ENR), proxy ineligible (IN_PR), or unknown eligible (UNK) depending on the value of FLAG_FIN. Returns were classified as eligible respondents (ER) and eligible nonrespondents (ENR) based on whether the questionnaire was completed.

Note that the value of ELIG_R = *IN_PR* was determined somewhat differently than in some earlier DMDC surveys where it was denoted *IN_SR* (self-reported ineligible). In the *1999 Survey of Active Duty Personnel* and the *2000 Survey of Reserve Component Personnel*, there was a question in the questionnaire that asked whether or not a member was still in the armed forces. This answer was used in addition to FLAG_FIN codes from the SCS to assign values of *IN_SR*. In WGR2002 there is no such question on the questionnaire, so the value of *IN_PR* was based on FLAG_FIN codes only.

Final Disposition Codes in Previous DMDC Surveys

Although there are some methodological differences, the WGR2002 is largely a replication of the DoD *1995 Sexual Harassment Survey* (*SHS*), *Forms A*, *B* and *C* (Mason et al., 1996). The differences between the 1995 and 2002 surveys are reflected in the steps used to create the analytical weights. The different weighting approaches affect the estimation of ineligible members for 1995 and 2002, which are not perfectly comparable.

In the *1995 SHS*, the sampling frame was constructed using the information from the October 1994 ADMF and the September 1994 Reserve Components Common Personnel Data System (RCCPDS). Ineligibles were identified when mailing addresses were updated with the January and April 1995 DEERS. Additional ineligibles were identified when members either sent a letter or a fax to indicate that they were no longer eligible (self-report ineligibility). All nonrespondents were assumed to be eligible if no further information was available. Table 9 shows the distribution of the sample eligible and ineligibles in the *1995 SHS*.

In the *1995 SHS*, the final weights were created in two steps. In the first step, the base weights were adjusted to account for eligible nonrespondents. In the *1995 SHS*, all members were considered eligible unless they were flagged as ineligibles when the sample was matched against the DEERS frames or if the member indicated through a fax or a letter that he/she was ineligible. Since the eligibility of every sampled member was assumed to be known, the weights were not adjusted for unknown eligibility as in the WGR2002. In the second step of weighting in the *1995 SHS*, the nonresponse-adjusted weights were poststratified to control totals derived from the January 1995 ADMF.

Table 10.
Eligibility in the 1995 SHS

Type	Description	Value	Sample Cases
Ineligibles	Variable INELCODE		
	Separation From the Military	1	1,611
	National Guard or Reserves	2	960
	Other Ineligible	3	22
	Self-reported Ineligible	4	203
	Total		2,796
Eligibles	Variable NRSPCODE		
	Study Respondent	0	47,255
	Refused Participation	1	92
	Returned Blank Questionnaire	2	131
	Missing Answers to all Relevant Questions	3	1,295
	Postal Non-delivery	4	4,986
	Nonrespondents	5	34,451
	Total		88,210
Grand Total			91,006

The weighting process and assignment of disposition codes for the WGR2002 differed from those in the *1995 SHS*. In the WGR2002, members who did not return the questionnaire and members who did not receive the questionnaire (postal non-delivery) were assumed to have unknown eligibility for the survey. As a result, base weights were adjusted for unknown eligibility in an additional step in weighting. A portion of members with unknown eligibility was considered to be ineligible based on the distribution of ineligibles observed in the sample (excluding the ineligibles determined by the frame). The "ineligibles determined by the frames" in the WGR2002 were identified from the updated frame used to derive control totals (December 2001 ADMF) matched to the sample.

The final estimate of ineligible members is higher when compared to the *1995 SHS* due to differences in the methodology used in weighting. However, based on previous DMDC surveys, there is evidence that some of the members who could not be located or did not return the questionnaire are ineligibles, which suggest that the 2002 weights are adjusted appropriately.

Weighting Procedures

The analysis of survey data from complex sample designs requires the use of weights to (1) compensate for variable probabilities of selection; (2) adjust for differential response rates; and (3) improve the precision of the survey-based estimates (Skinner, Holt, & Smith, 1989). To develop the weights for the WGR2002 survey, the following steps were conducted. First, base weights equal to the reciprocal of the probability of selection were assigned to each member selected for the sample. Next, to adjust the base weights for nonresponse, weighting classes were defined by relevant variables available on the May 2001 frame file. Finally, the

nonresponse-adjusted weights were ratio-adjusted or raked to population counts from the updated December frame. This last adjustment compensates for some changes in the eligible population between the times of sample selection and the beginning of data collection. Details of this weighting methodology are described in the following sections.

Calculation of Base Weights

The WGR2002 sample was randomly selected without replacement from a stratified frame. As such, the overall probabilities of selection vary by design strata in order to satisfy the precision goals specified by the study. Let U be the frame of the N units in the population (i.e., active duty members at the time of sampling). Note that the frame size N includes some units who were ineligible at the time the survey was conducted because, for example, they had left the Service. The frame U was partitioned into H non-overlapping strata $U_1,\ldots,U_H$ consisting of N_h units in each stratum h so that

$$N = \sum_{h=1}^{H} N_h .$$

A simple random sample of size n_h was selected without replacement within each stratum U_h. Given this design, the base weight for the i-th sampled member in stratum h was calculated as:

For each individual classified in stratum h, the base weight is the ratio of the total number of individuals in the stratum to the stratum-level sample size. The base weight w_{hi} is equal to the reciprocal of the probability of selection and is attached to each sample unit in the data file. Note that n_h is the number of persons initially sampled in stratum h without regard to whether or not the member ultimately participated in the survey.

Weighting Adjustments

In an ideal survey, all the units in the inference population are eligible to be selected into the sample and all those that are selected participate in the survey. In practice, neither of these conditions occurs. Some of the sampled units do not respond (unit nonresponse); some sample units are discovered to be ineligible; and the eligibility status of some units cannot be determined. If these problems are not addressed, the estimates of the survey will be biased. Nonresponse weight adjustments were used to deal with unknown eligibility and unit nonresponse. Raking was used to account for changes in the distribution of the population between the times of sampling and data collection. The following sections describe these methodologies in detail.

Unit nonresponse adjustments. Unit nonresponse (i.e., whole questionnaire nonresponse) occurs when a sampled member fails to respond for any reason. For example, nonresponse could result from failure to locate the member because of mobility or invalid/incorrect addresses in the frame, or from the unwillingness of some members to participate in the survey. Because the (unweighted) response rate (defined in a later section) in the survey was substantially less than 100 percent, adjusting for unit nonresponse was an important step in attempting to reduce bias.

To compensate for losses due to nonresponse, weights were adjusted in two stages. The first stage of adjustment accounts for the fact that the eligibility status of some sample persons could not be determined. The second stage of adjustment compensated for losses due to eligible sample persons who did not complete the questionnaire. At each stage the base weights of usable cases were inflated to account for ones that were unusable. These adjustments were done within classes that put persons with similar characteristics together.

This form of adjustment is referred to as sample weighting or weighting class adjustment since it adjusts the weighted distribution of the respondents across the weighting classes to that of the total sample (Kalton & Kasprzyk, 1989).

The drawback to nonresponse adjustment is that it increases the variability of the weights and, thus, tends to increase the sampling variance of some estimates (Kish, 1992). Ideally, the reduction in bias from using a nonresponse adjustment more than compensates for the increase in variance. When the weighting classes contain sufficient cases and the adjustment factors do not become either inordinately large or substantially different from each other, the effect on variances is modest. Very large adjustment factors or factors that are much different from others can occur in weighting classes with high nonresponse rates or small numbers of respondents. To avoid the second situation, weighting classes with few respondents were combined to form a new cell with a minimum of 30 cases.

For sample weighting adjustments to be effective in reducing nonresponse biases, it is desirable that the weighting classes be internally homogeneous with respect to response propensity. Equivalently, a criterion for constructing the weighting classes is that the variation in response propensity between the classes be as large as possible without unduly inflating sampling variances. The criteria used to create the weighting classes are described in a later section.

As discussed previously, each sampled member was assigned to an appropriate response-status group (*ER*, *ENR*, *IN_FR*, *IN_PR*, or *UNK*). At the first stage of weight adjustment, that the unknowns (Group *UNK*) were assumed to have been distributed among the *ER*, *ENR*, and *IN_PR* categories had it been possible to determine their status. In particular, it was assumed that there are no cases among the unknowns that were like the *IN_FR* cases, which were ineligible because they did not match the September DEERS or December ADMF. Thus, the *IN_FR* cases did not have their weights increased to represent any of the unknowns (all truly *IN_FR* cases were identified). The first-stage nonresponse adjustment factor was calculated within weighting class *c* as:

$$f_c^{A1} \begin{cases} \dfrac{\sum_{i \in ER_c} w_i + \sum_{i \in ENR_c} w_i + \sum_{i \in IN\_PR_c} w_i + \sum_{i \in UNK_c} w_i}{\sum_{i \in ER_c} w_i + \sum_{i \in ENR_c} w_i + \sum_{i \in IN\_PR_c} w_i} & \text{If the } i\text{-th sample person classified in weighting class } c \text{ belongs to response group } ER_c, ENR_c, \text{ or } IN\_PR_c. \\ 1 & \text{If the } i\text{-th sample person in class } c \text{ belongs to response group } IN\_FR_c. \\ 0 & \text{If the } i\text{-th sample person in class } c \text{ is in } UNK_c. \end{cases}$$

The sums in the numerator of f_c^{A1} extend over the following types of persons in class *c*: eligible respondents (*ER*), eligible nonrespondents (*ENR*), the proxy-reported ineligibles (*IN_PR*), and the unknowns (*UNK*). The term w_i is the base weight for the *i*-th sampled person in class *c*. (As a notational convenience, the subscript *h* is omitted for the sampling stratum since a class *c* may extend across strata. However, as described subsequently, the eligibility adjustments and the nonresponse adjustments are almost always made using classes that are subdivisions of design strata or the design strata themselves.)

The first nonresponse-adjusted weight w_i^{A1} for a sample member in class *c* was then computed as:

$$w_i^{A1} = f_c^{A1} w_i \, .$$

Thus, if persons with unknown eligibility accounted for 50 percent of the weight in class *c*, the weights on the other units were increased by a factor of 2.

The second nonresponse adjustment increased the adjusted weight of eligible respondents to account for eligible nonrespondents. The second-stage nonresponse adjustment factor for class *c* was computed as:

$$f_c^{A2}\begin{cases} \dfrac{\sum_{i\in ER_c} w_i^{A1} + \sum_{i\in ENR_c} w_i^{A1}}{\sum_{i\in ER_c} w_i^{A1}} & \text{If the } i\text{-th sample person in weighting class } c \text{ belongs to response group } ER_c. \\ 0 & \text{If the } i\text{-th sample person sampled in weighting class } c \text{ belongs to response group } ENR_c. \\ 1 & \text{If the } i\text{-th sample person is in } IN\_PR_c \text{ or } IN\_FR_c. \end{cases}$$

The first sum in the numerator of f_c^{A2} for eligible respondents extends over the respondents (Group *ER*) in class *c*; the second extends over the eligible nonrespondents (Group *ENR*) in class *c*; and w_i^{A1} is the previously adjusted weight of the *i*-th sample member.

The second nonresponse-adjusted weight w_i^{A2} for the *i*-th sample member classified in weighting class *c* was computed as:

$$w_i^{A2} = f_c^{A2} w_i^{A1}.$$

After the two stages of nonresponse adjustment, the weight for a respondent in weighting class *c* becomes

$$w_i^{A2} = f_c^{A2} f_c^{A1} w_i.$$

Note that after the two stages of nonresponse adjustment, the persons with non-zero weight are those in *ER*, *IN_PR*, and *IN_FR*. The members with unknown eligibility (*UNK*) and eligible nonrespondents (*ENR*) have zero weight.

A difference between the *1995 SHS* (Mason et al., 1996) and the weighting approach for the WGR2002 was the inclusion of the two weighting adjustments above rather than a single nonresponse adjustment. The first adjustment allocated the members with unknown eligibility (*UNK*) between eligible (*ER* and *ENR*) and ineligible members (*IN_PR*). The second adjusted the weight of the eligible respondent members (*ER*) to account for the eligible nonrespondents (*ENR*) as described in previous sections.

In the *1995 SHS* there was only one nonresponse adjustment before poststratification. Implicitly it was assumed that the eligibility of each sampled member was known during the weighting process (there were no members coded as *UNK*). As a result, the weights of the nonrespondents were allocated to the respondents without increasing the weights of the ineligibles. The estimate of the number of ineligibles before poststratification did not change after the adjustment. In the approach to the WGR2002 weighting, it was assumed that some members with unknown eligibility *UNK* were not on active duty anymore and, as a result, these members were ineligible. In the first adjustment, the weight of the members coded as *UNK* was distributed among the eligible respondents *ER*, eligible nonrespondents *ENR,* and ineligible

members *IN_PR* (excluding the ineligible members based on the frame information). Consequently, after the first adjustment, the estimate of *IN_PR* ineligible members was larger. Since the second adjustment distributed the weight of the eligible nonrespondents *ENR* to the eligible respondents only, the estimate of *IN_PR* ineligible members remained unchanged. It is important to note that if there were not any members with unknown eligibility *UNK* in the sample (or if it had been assumed that all non-located members or members that did not return the questionnaire were eligible), then there would have been only one adjustment similar to the *1995 SHS*.

Construction of weighting classes. The main objective in constructing weighting classes was to group respondents and nonrespondents with similar selected characteristics into the same weighting classes. Ideally, the characteristics should be related to both the likelihood of responding to the survey and to values of the data items collected/recorded. Each of the characteristics must be available for all initial sample persons in order to create classes. The sampling strata were used as the starting point for the creation of the weighting classes. The sampling strata were created from variables that were related to survey response propensity and/or differences important to the survey topics. For the WGR2002, the stratification variables were Service, gender, paygrade group, race/ethnicity, and occupational PERSTEMPO group. The first four variables were also used in the stratification of the frame for *1995 SHS*.

The creation of the weighting classes depended on the number of respondents in the sampling strata. The weighting class corresponded to the sampling stratum when the number of respondents was greater than 30. Any sampling stratum with fewer than 30 respondents was combined with another "nearby" stratum to form a weighting class. When combining strata, the characteristics for Service, gender, and paygrade groups were preserved. These three stratification variables were considered as hard boundaries that were not crossed when combining strata. Combining strata with different values of race/ethnicity were avoided whenever possible.

The initial plan also included a provision to subdivide into smaller weighting classes all strata with more than 500 respondents. However, in WGR2002, all strata had fewer than 500 respondents, so no subdividing was done.

The nonresponse adjustment was done within each weighting class created from the original or combined sampling strata. Any classes having unusually large values of the adjustment factors f_c^{A1}, or f_c^{A2} were examined. Weighting classes with large adjustment factors were combined with other similar ones to form new weighting classes with smaller adjustments.

The weighting classes are listed in Table B-1 in Appendix B. These cells were used for both the first and second stages of nonresponse adjustment. The table also lists the adjustment factors f_c^{A1} and f_c^{A2} for each weighting class.

Poststratification versus raking. Poststratification and raking are two alternative ways of using population control information when creating weights. Both methods are commonly used in survey estimation and will produce approximately unbiased estimates as long as the nonresponse-adjusted weights give unbiased estimates.

Raking is an estimation procedure in which estimates are controlled to marginal population totals. Raking can be thought of as a multidimensional poststratification procedure, because the weights are basically poststratified to one set of control totals (a dimension), then these adjusted weights are poststratified to another dimension. After all dimensions are adjusted, the process is iterated until the control totals for all the dimensions are simultaneously satisfied (at least within a specified tolerance). Brackstone and Rao (1979) and Deville and Särndal (1992) also describe some aspects of raking.

To illustrate the difference between the two approaches, consider using Service and gender as auxiliary variables with H and J classes for either poststratification or raking (discussion is limited to two variables for simplicity, but 5 are used in the WGR2002). If the cross of Service-by-gender is used to create poststrata, then each cell in the two-way table would be a poststratum, and a control total is needed for each cell. In raking, only marginal totals for each category of Service and gender are required. If the variables are cross-classified and the sample counts in some cells are small, then poststratification produces unstable estimates unless the cells in the cross-tabulation are collapsed. With 5 dimensions, the level of collapsing would have to be very extensive. This is not an issue in raking since the weights are adjusted to the marginal totals of the counts rather than the cell counts used in poststratification.

Raking is very efficient in reducing the variance of the estimates if the estimates in the cross-tabulation are consistent with a model that ignores the interactions between variables. In the Service-gender example the raked weight can be written as $\tilde{w}_{cd,i} = w_{cd}\hat{\alpha}_c\hat{\beta}_d$, where w_{cd} is the pre-raked weight of an observation in cell (*c,d*) of the cross-tabulation, $\hat{\alpha}_c$ is the effect of the first variable (Service), and $\hat{\beta}_d$ is the effect of the second variable (gender). Note that in this formulation there is no interaction effect. In this sense, the weights are determined by the marginal distributions of the control variables.

In practical terms, raking is somewhat more flexible in the sense of allowing a larger number of variables as controls without running into computational limitations. For example, matching administrative record counts for Service, gender, paygrade group, and other demographics would have cosmetic appeal for users who compare DMDC survey estimates to administrative record systems. However, the universe represented by WGR2002 does not coincide with that of an administrative record system like DEERS or ADMF at a particular date. The survey universe consists of those personnel who were eligible at the time of sampling (i.e., May 2001 ADMF) and are still eligible at the start of data collection (December 2001 ADMF). This set of "surviving eligibles" is not the same as either the set covered by the May ADMF or the December ADMF.

Another practical issue is how to calculate sampling errors that reflect the method of estimation that is actually used. WesVar can appropriately handle either method since weights are recomputed for every replicate subsample using all steps in estimation, including adjustment by either poststratification or raking. Linearization variance estimates in SUDAAN® (Research Triangle Institute 1997) can properly account for poststratification but not raking. When raking is used, one possibility is to identify one raking variable that has the most effect on standard errors and to tell SUDAAN that the weights on that variable were poststratified. Another option in SUDAAN version 8 is to use replicate weights, in which case the standard errors will be identical to those produced by WesVar® (Westat 2000).

In the *1995 SHS* (Mason et al., 1996), poststratification was used in the final step when producing the analysis weights. The poststratification cells were created using population totals for the cross-tabulation of Service and gender. Additional analysis (Bastian, Lancaster, & Reyst, 1996) showed that some paygrade groups (junior enlisted E1–E4, senior enlisted E5–E9, and officers) and race/ethnicity groups (White, Black, and Other) had higher rates of reporting unwanted sex/gender related behavior. These results suggest possible gains in precision if these variables are used for post-stratification or raking.

For the WGR2002, the following variables were considered for creating poststratification or raking cells:

- Service;
- Gender;
- Paygrade group;
- Race/Ethnicity;
- Age; and
- Education.

After consideration of the options, DMDC and Westat jointly determined that raking to match or nearly match the administrative record distribution of these demographic variables from the December 2001 frame outweighed any disadvantages that raking might have. Raking also the control of more detailed marginal distributions (additional levels) than would poststratification. The latter requires that the full cross-classification of variables be used, while raking controls only to marginal distributions. The particular combinations of variables that were used for raking dimensions can be seen below in Table 11.

Table 11.
Combinations of Variables Used for Raking Dimensions

Dimension	Variables
DIM1	Service by sex by age
DIM2	Service by education
DIM3	Service by race/ethnicity
DIM4	Service by paygrade group
DIM5	Paygrade

The categories and control totals for each of these variables are listed in Tables 12-16. Note that creating composite variables for raking that are crosses of two or more individual variables, also accounts for some degree of interaction.

Table 12.
Definition and Control Total of the Dimension (DIM1) Used in Raking

DIM1	Service	Gender	Age Group	Control Total
1	Army	Male	Less Than 25 +	126,614
2	Army	Male	25-29	76,328
3	Army	Male	30-34	61,577
4	Army	Male	35 and Older	89,797
5	Army	Female	Less Than 25 +	25,785
6	Army	Female	25-29	13,819
7	Army	Female	30-34	9,886
8	Army	Female	35 and Older	13,279
9	Navy	Male	Less Than 25 +	100,379
10	Navy	Male	25-29	56,880
11	Navy	Male	30-34	47,822
12	Navy	Male	35 and Older	82,523
13	Navy	Female	Less Than 25 +	21,653
14	Navy	Female	25-29	9,056
15	Navy	Female	30-34	5,581
16	Navy	Female	35 and Older	9,863
17	Marine Corps	Male	Less Than 25 +	80,182
18	Marine Corps	Male	25-29	25,513
19	Marine Corps	Male	30-34	14,936
20	Marine Corps	Male	35 and Older	19,909
21	Marine Corps	Female	Less Than 25 +	5,642
22	Marine Corps	Female	25-29	1,512
23	Marine Corps	Female	30-34	859
24	Marine Corps	Female	35 and Older	962
25	Air Force	Male	Less Than 25 +	75,219
26	Air Force	Male	25-29	50,549
27	Air Force	Male	30-34	45,270
28	Air Force	Male	35 and Older	92,783
29	Air Force	Female	Less Than 25 +	25,423
30	Air Force	Female	25-29	13,708
31	Air Force	Female	30-34	8,975
32	Air Force	Female	35 and Older	13,747
33	Coast Guard	Male	Less Than 25 +	8,288
34	Coast Guard	Male	25-29	5,707
35	Coast Guard	Male	30-34	4,672
36	Coast Guard	Male	35 and Older	10,130
37	Coast Guard	Female	Less Than 25 +	1,237
38	Coast Guard	Female	25-29	747
39	Coast Guard	Female	30-34	440
40	Coast Guard	Female	35 and Older	755
Total				1,258,007

Table 13.
Definition and Control Total of the Dimension (DIM2) Used in Raking

DIM2	Service	Education	Control Total
1	Army	High School Degree or Less	316,124
2	Army	Some College but Less Than 4-yr. Degree	25,763
3	Army	4-Yr. College Degree or Graduate School	75,198
4	Navy	High School Degree or Less	272,606
5	Navy	Some College but Less Than 4-yr. Degree	16,261
6	Navy	4-Yr. College Degree or Graduate School	44,890
7	Marine Corps	High School Degree or Less	129,309
8	Marine Corps	Some College but Less Than 4-yr. Degree	3,781
9	Marine Corps	4-Yr. College Degree or Graduate School	16,425
10	Air Force	High School Degree or Less	209,998
11	Air Force	Some College but Less Than 4-yr. Degree	38,454
12	Air Force	4-Yr. College Degree or Graduate School	77,222
13	Coast Guard	All	31,976
Total			1,258,007

Table 14.
Definition and Control Total of the Dimension (DIM3) Used in Raking

DIM3	Service	Race/Ethnicity	Control Total
1	Army	Hispanic	36,655
2	Army	Black, non-Hispanic	112,247
3	Army	Other	268,183
4	Navy	Hispanic	31,421
5	Navy	Black, non-Hispanic	63,263
6	Navy	Other	239,073
7	Marine Corps	Hispanic	19,603
8	Marine Corps	Black, non-Hispanic	22,877
9	Marine Corps	Other	107,035
10	Air Force	Hispanic	16,344
11	Air Force	Black, non-Hispanic	52,982
12	Air Force	Other	256,348
13	Coast Guard	Hispanic	2,118
14	Coast Guard	Black, non-Hispanic	1,905
15	Coast Guard	Other	27,953
Total			1,258,007

Table 15.
Definition and Control Total of the Dimension (DIM4) Used in Raking

DIM4	Service	Paygrade Group	Control Total
1	Army	E1—E3	75,783
2	Army	E4	94,157
3	Army	E5—E6, Unknown	128,603
4	Army	E7—E9	49,069
5	Army	W1—W5	11,060
6	Army	O1—O6	58,413
7	Navy	E1—E3	61,460
8	Navy	E4	65,215
9	Navy	E5—E6, Unknown	124,113
10	Navy	E7—E9	33,464
11	Navy	W1—W5	1,751
12	Navy	O1—O6	47,754
13	Marine Corps	E1—E3	53,239
14	Marine Corps	E4	29,105
15	Marine Corps	E5—E6, Unknown	36,555
16	Marine Corps	E7—E9	13,660
17	Marine Corps	W1—W5	1,811
18	Marine Corps	O1—O6	15,145
19	Air Force	E1—E3	58,228
20	Air Force	E4	52,279
21	Air Force	E5—E6, Unknown	112,673
22	Air Force	E7—E9	37,489
23	Air Force	O1—O6	65,005
24	Coast Guard	E1—E3	4,336
25	Coast Guard	E4	6,292
26	Coast Guard	E5—E6, Unknown	11,123
27	Coast Guard	E7—E9	3,553
28	Coast Guard	W1—W5	1,383
29	Coast Guard	O1—O6	5,289
Total			1,258,007

Table 16.
Definition and Control Total of the Dimension (DIM5) Used in Raking

DIM5	Paygrade Group	Control Total
1	E1	9,841
2	E2	55,417
3	E3	187,788
4	E4	247,128
5	E5	242,006
6	E6	171,061
7	E7	100,151
8	E8	26,502
9	E9	10,582
10	W1	2,207
11	W2	6,726
12	W3	4,366
13	W4—W5	2,706
15	O1	19,013
16	O2	24,505
17	O3	65,488
18	O4	43,211
19	O5	27,782
20	O6	11,527
Total		1,258,007

Raking adjustment. The nonresponse-adjusted weights were raked to force sample estimates of numbers of persons to equal known population totals. In the WGR2002 survey, the function of raking was variance reduction and adjustment of the May 2001 sample to reflect the December 2001 distribution among categories defined by the raking dimensions.

The population totals or controls were produced using the December 2001 ADMF frame, which was also used for eligibility determination. The updated frame reflected any changes in the population between the time of sampling and the start of the field period.

The variable F_ELIG (see previous section on *Frame Eligibility*) that was defined for all the records on the frame, including both sample and nonsample persons, was used to compute control totals. The variable F_ELIG summarizes the eligibility of the member using the September 2001 DEERS file and December 2001 ADMF frame, as indicated in Table 3. The control totals for each raking dimension were computed by counting the eligible members in the matched frames using the member characteristics as of the December frame. The December 2001 characteristics of the member were merged with the sample in order to classify them based on the raking variables.

The mechanics of the raking weight adjustment proceeded as follows:

The population was partitioned, based on the first raking dimension, into groups denoted by $U_1, \ldots, U_G$. The groups are by definition mutually exclusive and cover the entire population. Let N_g be the size of U_g, so that $N = \sum_{g=1}^{G} N_g$. The eligible respondents in the sample were also partitioned into groups $s_1, \ldots, s_G$. The expression for the initial weighting adjustment factor for all the units classified in cell g is

$$\tilde{f}_g^R = \frac{N_g}{\sum_{i \in s_g} w_i^{A2}}.$$

The raked weight $\tilde{w}_i^R$ for the i-th sample person classified in cell g of the first raking dimension was then computed as:

$$\tilde{w}_i^R = \tilde{f}_g^R w_i^{A2}, i \in s_g.$$

A similar adjustment was then made after classifying the sample based on the second raking dimension, and so on, for the third, fourth, and fifth dimensions. Successively adjusting the weights based on all five dimensions constitutes the first iteration of the process. The adjustments for dimensions 2–5 result in the sum of weights for persons classified by dimension 1 not equaling the control totals for dimension 1. The adjustments for dimensions 1–5 are then repeated beginning with the adjusted weights from the first iteration. The iterative process continues until the sum of the weights for each raking dimension is acceptably close to the corresponding control total. For WGR2002, the sum of the raked weights differed by at most 28 persons from each control total. For most categories this is a relative error of less than 1 percent. The final raked weight w_i^R for the i-th sample person was then computed as:

$$\tilde{w}_i^R = \tilde{f}_g^R w_i^{A2}, \quad i \in s_g$$

where f_i^R is the product of the iterative adjustments applied to the i-th sample person.

Some sample members who were eligible on the December frame were reported by themselves or proxies as actually being ineligible. Those persons received a separate ineligibility code (*IN_PR*) as noted earlier. Existence of such persons was evidence that the December frame also contained some ineligible cases. Consequently, sample persons coded as eligible respondents (*ER*) and ineligibles (*IN_PR*) were both included in raking.

After raking, the cases with non-zero weights were those in *ER* and *IN_PR*. Cases coded as *ENR*, *IN_FR*, and *UNK* had zero weights.

Table 17 summarizes which cases were included in each step of the weighting process. The last column shows the general form of the final weight applied to persons in the various disposition categories. Only eligible respondents (*ER*) and proxy-reported ineligibles (*IN_PR*) received a non-zero final weight.

Table 17.
Cases Assigned Weights in Each Step of the Weighting Process by Type of Disposition

Disposition	Nonresponse Adjustment Factor, Step 1	Nonresponse Adjustment Factor, Step 2	Nonresponse Adjusted Weight	Raking Factor	Final Weight
ER	f_c^{A1}	f_c^{A2}	$f_c^{A1} f_c^{A2} w_i$	f_g^p	$f_c^{A1} f_c^{A2} f_g^p w_i$
ENR	f_c^{A1}	0	0	0	0
IN_PR	f_c^{A1}	1	$f_c^{A1} w_i$	f_g^p	$f_c^{A1} f_g^p w_i$
IN_FR	1	1	w_i	0	0
UNK	0	0	0	0	0

Computation of Variance Estimates

Variance estimation procedures are developed to account for the sample design and estimators employed in a complex survey. Using these procedures, analysts can appropriately reflect factors such as sample selection in multiple stages and the use of differential sampling rates to oversample a targeted subpopulation in estimates of sampling error. The two main methods for estimating variances from a complex survey are known as Taylor series variance estimation and replication. Wolter (1985) is a useful reference on the theory and applications of these methods. Shao (1996) is a more recent review paper that compares the methods. The next two sections describe how these methods can be implemented to compute variances of the estimates for the WGR2002.

Taylor Series Method to Compute Variances

A widely used method for estimating variances in complex surveys is based on the Taylor series approximation. A linear approximation to a statistic is formed and then substituted into the formula for calculating the variance of a linear estimate appropriate for the sample design. The Taylor series method relies on the simplicity associated with estimating the variance for a linear statistic, even with a complex sample design, and is valid in large samples. In this formulation, the variance strata and primary sampling units (PSUs) must be defined.

SUDAAN is a software package designed to produce variance estimates for complex surveys using the Taylor series method. SUDAAN computes standard errors of the estimates by taking into account most features of complex sample designs and estimators. SUDAAN is also capable of reflecting stratum-by-stratum finite population correction (*fpc*) factors in the computation of variances. This is particularly important for surveys conducted by DMDC, where some strata are sampled at high rates. In the *1995 SHS* (Mason et al., 1996), variances of the estimates were computed using SUDAAN based on the Taylor series approximation.

For descriptive statistics, SUDAAN offers three procedures: PROC CROSSTAB for categorical variables, PROC DESCRIPT for continuous variables, and PROC RATIO for ratios of totals. These procedures can be used to compute statistics of interest, such as estimated totals,

means, and percentages, along with their corresponding standard errors, design effects, and confidence intervals. SUDAAN can be used to reflect the facts that:

- the December frame contains members who were proxy-reported as ineligible, or would had been found ineligible had they been surveyed; and
- the *fpc* is important in some strata.

SUDAAN cannot completely account for the fact that raking was used. An expedient that should produce standard errors that are approximately correct is to identify the one raking dimension that has the most effect on standard errors and to tell SUDAAN that the variable representing that dimension was used for poststratification. SUDAAN can account for the effect of poststratifying weights to control totals through the use of POSTVAR and POSTWGT statements. The estimates of standard errors will reflect the effect of poststratification. The option is valid only in PROC DESCRIPT and PROC RATIO and design effects are not computed with this option.

Differences of table cell estimates can also be computed in PROC DESCRIPT and PROC RATIO. The statements that control these calculations are CONTRAST, DIFFVAR, and PAIRWISE.

To reflect the effect of the design in variance estimation, SUDAAN requires variables that indicate the variance estimation strata and sampled PSUs. The variance estimation strata are generally the original sampling design strata from which the sample was drawn. The sampled PSU corresponds to the individual sampled person. In some design strata the initial sample will be small and will be even further reduced due to nonresponse. Small sample sizes can lead to unstable variance estimates. This problem was limited by collapsing original strata with fewer than 30 respondents. Table B-3 in Appendix B shows the creation of the variance estimation strata.

The variance strata and PSU indicator variables are part of the data set delivered to DMDC so that estimates and their standard errors can be computed using SUDAAN. Appendix J of Willis, Mohamed, and Lipari, (2002) includes several examples of SUDAAN programs to illustrate how points (i) and (ii) above are handled along with examples of how to calculate differences in table cell estimates.

SAS version 8® (SAS Institute, 2000) has two procedures for analyzing survey data: PROC SURVEYMEANS and PROC SURVEYREG. Both use the Taylor series linearization approach to estimate standard errors. SURVEYMEANS produces estimates of means, proportions, and totals, while SURVEYREG fits linear regression models (logistic regression is not yet available). No design effects are estimated with either PROC. Estimates of differences or other linear combinations are not available in SURVEYMEANS.

These procedures are new in SAS and do not contain as many features as some other packages. Finite population correction factors can be included in variance estimates for WGR2002, but the effect of nonresponse adjustments and raking cannot. Accounting for the December frame containing some ineligible units is done by using a DOMAIN statement to treat the eligibles as a subpopulation of the weighted cases.

Replication Methods

The basic idea behind replication is to draw subsamples from the full sample, compute the estimate from each of the subsamples, and estimate the variance from the subsample estimates. The subsamples are called replicates and the estimates from the subsamples are called replicate estimates. Rust and Rao (1996) discuss replication methods, show how the units included in the subsamples can be defined using variance strata and units, and describe how these methods can be implemented using weights.

Replicate weights are created to derive a corresponding set of replicate estimates. Each replicate weight will be constructed using the same estimation steps as the full sample weight, but using only the subsample of cases composing each replicate.

WesVar is a computer software program that generates measures of variability (e.g., standard errors, coefficients of variation, and confidence intervals) for estimates using a specified set of replicate weights. WesVar allows derived statistics, like differences or ratios, to be calculated using the Cell Function feature of tables.

An advantage of using replication as the method to estimate variances is the ability to reflect all aspects of weighting: the design, the effect of the nonresponse adjustments, and raking. Since the sampling rate is high for some strata, it also includes provisions to approximately reflect the finite population correction factors in the computation of variances. Once replicate weights are constructed, no special care is needed for subgroups of interest, and no knowledge of the sample design is required.

For reference, Table 18 lists some of the features available in SUDAAN, SAS, and WesVar that are relevant to the WGR2002 analysis. This list is not exhaustive, particularly for SUDAAN and WesVar. There are other analysis features in SUDAAN and WesVar that may also be of interest to some data users.

The Jackknife Method. The method of replication used in the WGR2002 is known as the stratified, delete-one jackknife. The general procedure is to form groups of sample persons, and then to form replicates or subsamples by deleting one group at a time. The method is called JKn in WesVar. The method is discussed in some depth in Chapter 4 of Wolter (1985) and in Rust (1986).

Table 18.
Features of Three Software Packages for the Analysis of Survey Data

Feature	SUDAAN	SAS	WesVar
Estimation features reflected in variance estimates			
Stratification	x	x	x
Ineligible cases in poststratification frame	x	x	x
Differential weights among cases	x	x	x
Nonresponse adjustments (unknown eligibility, eligible nonrespondents)	x*	NA	x
Poststratification	x	NA	x
Raking	x*	NA	x
Finite population correction factors	x	x	x **
Tables			
Totals/standard errors	x	x	x
Means/standard errors	x	x	x
Proportions/standard errors	x	x	x
Multi-way tables	x	x	x
Differences of cell estimates/standard errors	x	NA	x
Ratios of cell estimates	x	NA	x
Linear regression			
Parameter estimates/standard errors	x	x	x
Confidence intervals for parameters	x	x	x
Logistic regression			
Parameter estimates/standard errors	x	NA	x
Confidence intervals for parameters	x	NA	x
Odds ratios/confidence intervals	x	NA	x
Multinomial logistic regression (unordered categories)			
Parameter estimates/standard errors	x	NA	x
Odds ratios/confidence intervals	x	NA	x
Multinomial logistic regression (ordered categories)			
Parameter estimates/standard errors	x	NA	NA
Odds ratios/confidence intervals	x	NA	NA

Note: NA = not available.

*Available in SUDAAN when estimates based on replication methods are computed.

**Common fpc's at the replicate level.

To implement the method, variance strata (denoted in WesVar as *VARSTRAT*) and variance units (denoted as *VARUNIT*) were created. The variance strata were combinations of design strata. The variance units were groups of initial sample persons, including eligibles, ineligibles, and unknowns. Let $\tilde{h}$ be a variance stratum and denote the number of *VARUNIT*s in stratum $\tilde{h}$ by $n_{\tilde{h}}$. Since one *VARUNIT* is omitted at a time in the JKn method, the total number of replicate estimates is

$$G = \sum_{\tilde{h}=1}^{\tilde{H}} n_{\tilde{h}}$$

where $\tilde{H}$ is the number of variance strata. Note that $\tilde{H}$ may be different from the number of design strata.

Let *g* denote a particular combination of *VARSTRAT* and *VARUNIT*. Denote the replicate estimate formed by deleting *VARSTRAT-VARUNIT g* by $\hat{t}_{(g)}$. Because one *VARUNIT* is omitted at a time for JKn, *g* can be used to identify the *VARUNIT* itself, the set of sample units (i.e., the replicate) that remains after omitting unit *g*, and the estimate computed from that replicate set of sample units.

The weights used in calculating $\hat{t}_{(g)}$ account for the deletion of *g* from the sample as follows. Suppose that *g* identifies a *VARUNIT* in *VARSTRAT* $\tilde{h}$. When *VARSTRAT-VARUNIT g* is omitted, the base weights associated with the other $n_{\tilde{h}} - 1$ variance units in *VARSTRAT* $\tilde{h}$ are multiplied by the factor:

$$\frac{n_{\tilde{h}}}{n_{\tilde{h}} - 1}.$$

The base weight for *VARSTRAT-VARUNIT g* is multiplied by 0 to indicate that replicate *g* is deleted. The weights on all *VARUNIT*s in all other *VARSTAT* are unchanged. The two nonresponse adjustment steps and the poststratification step, described above, are then carried through using the sample units in replicate *g* and their modified base weights. The estimate from replicate *g*, $\hat{t}_{(g)}$, thus, reflects all stages of weighting.

The JKn variance estimate for the full sample estimate $\hat{t}$ is then

$$v(\hat{t}) = \sum_{g=1}^{G} f_g h_g \left[\hat{t}_{(g)} - \hat{t}\right]^2$$

where f_g is the finite population correction (*fpc*) factor associated with the variance stratum containing unit *g* and $h_g = \left(n_{\tilde{h}} - 1\right)/n_{\tilde{h}}$ where $\tilde{h}$ is the *VARSTRAT* that contains unit *g*. The h_g are referred to as "JKn factors." In forming variance strata, it is important to put design strata having the same or nearly the same *fpc* together in a variance stratum. This can be done

only approximately since the sampling rates vary considerably among the WGR2002 design strata.

Each sample person's record in the data file will have $G+1$ weights attached—one for the full sample and *G* replicate sample weights, computed as described above. In WesVar a data set called a *VAR* file is created that contains an indicator that the JKn method was used to create weights, the weights themselves, the finite population correction factors, and the h_g factors. When a user does tabulations or other analyses in WesVar using the *VAR* file, WesVar automatically evaluates variances using the JKn formula.

Number of replicates. A key step in designing the replicate structure is to determine the number of replicates. The choice of the number of replicates is based on the desire to obtain an adequate number of degrees of freedom (*DF*) to ensure stable estimates of variance, while not having so many as to make the time or cost of computing variance estimates unnecessarily high. At *DF*=30, percentiles of the *t*-distribution are near those for the normal distribution; at *DF*=60, they are virtually the same as those for the normal. A rule of thumb is, thus, that at least 30 degrees of freedom are needed to obtain relatively stable variance estimates. The stability of a variance estimate for a subgroup is related to the number of *VARSTRAT* and *VARUNIT*s contributing to the subgroup estimate. Some subgroups, like white males, are found in many design strata while others, like females in the Coast Guard, are in few.

Note that having an adequate number of *DF* is not a concern in SUDAAN because the linearization variance estimates will have thousands of *DF* for full sample estimates. Domain estimates will have variances with fewer *DF* but probably still enough to insure stability.

Formation of replicates. The inclusion of the finite population correction (*fpc*) factor is not a straightforward process when replicates are used. As shown in the expression for the variance when JKn replicates are used, the inclusion of the *fpc* (factor f_g) is only possible at the replicate level. Ideally, the creation of the replicate should be restricted to include the records from a single stratum only, in order to reflect the effect of the *fpc* in that specific stratum. At the same time, as described before, to make more precise estimates at the stratum level, at least 30 replicates per stratum need to be created. Then the total number of replicates to create would be approximated as:

$$\text{Total replicates} \geq 30 * (\text{Number of strata}).$$

The WGR2002 survey has 249 strata and, with the rule above, the required number of replicates needed to fully reflect the *fpc* in each design stratum would be about 7,470. Such a large number of replicates would be burdensome in practice. To solve this problem, an overall *fpc* was used for groups with similar sampling fractions, and collapsed design strata when the variance strata were created. The *fpc* for a stratum *h* is

$$fpc_h = 1 - r_h = 1 - \frac{n_h}{N_h}$$

where r_h = the sampling fraction or sampling rate defined as the ratio of the sample size n_h to the total population N_h in stratum *h*.

The pertinent sampling rate here is the achieved rate defined as the number of respondents (not the initial sample size) divided by the population size.

Zones of strata were created such that the design strata within a zone all have approximately the same *fpc*. The zones were then equated to the *VARSTRAT* for use in WesVar. Table 19 shows the ranges of stratum sampling rates in each zone and the number of design strata in each.

Table 19.
Replicate Zones for the WGR2002

Zone	Range of Sampling Rate	Number of Strata	Percentage
1	[0.37, 1.00]	5	0.04
2	[0.24, 0.37)	18	0.21
3	[0.10, 0.24)	26	1.05
4	[0.00, 0.10)	200	98.71
Total		249	100.00

An overall *fpc* factor was applied to the strata within each zone. The overall *fpc* factor was computed using the minimum sampling rate within the zone. The overall *fpc* is an approximation of the actual stratum *fpc* except for the stratum with the minimum sampling rate where these are the same. Except in this case, the overall *fpc* is larger than the actual stratum *fpc*, leading to an overestimation of the variance for estimates for these strata. As a result, this procedure yields somewhat conservative variance estimates. Nevertheless, large improvements are expected in the precision of some domain estimates compared with the case where the *fpc* is ignored entirely. The *fpc* for each zone is reported in Table 20.

An alternative is to use an overall *fpc* computed using the average of the sampling rates of the strata within each zone. However, in this case, the variances can be underestimated for all strata with *fpc* larger than the average *fpc*.

Table 20.
Overall fpc for the Replicate Zones

Zone	Minimum Sampling Rate	Overall *fpc* Factor
1	0.38298	0.6264
2	0.24005	0.7576
3	0.10000	0.9000
4	0.00315	0.9974

The design strata can be collapsed (or "folded") into pseudo-strata or replicate variance strata (*VARSTRAT*) to reduce the number of replicates. The number of variance strata and the number of replicates created within each variance stratum affect the number of degrees of freedom of the estimate of variance. As described before, each design stratum should ideally contain at least 30 replicates. Since the replicate zones had already been formed by collapsing

the design strata, they were used as variance strata. Table 21 shows the number of variance strata and number of replicates created within each variance stratum.

Table 21.
VARSTRAT and VARUNIT for the WGR2002

VARSTRAT	Number of Replicates(VARUNIT)	JKn Factor (h_g)
1	30	0.96667
2	30	0.96667
3	30	0.96667
4	80	0.98750
Total	170	

To assign the value of *VARUNIT*, all the records were sorted in the same random order in which they were sampled within *VARSTRAT*. The value of *VARUNIT* is a sequential number starting from 1 that is assigned to each record. When the sequential number reached the maximum number of *VARUNIT* within *VARSTRAT*, it restarted at one. This process was repeated until each record had a value of *VARUNIT*. For example, if 30 replicates were assigned to *VARSTRAT*=1 (i.e., zone = 1) the records were serially numbered 1, 2, …, 30, 1, 2, …, 30 and so on. All of the records numbered 1 were assigned to *VARUNIT* 1; all of the records numbered 2 were assigned to *VARUNIT* 2, and so on. The records with *VARUNIT*=1 were, thus, a subsample of the sample from all design strata assigned to *VARSTRAT*=1, as are the records in the other *VARUNIT*s. Because the ordering of the sample persons was random, this method effectively divided the sample in each *VARSTRAT* into random groups.

To form the replicates, a series of factors REPF $(\tilde{h}, g)$ (replicate factor for *VARUNIT*=g in *VARSTRAT*= $\tilde{h}$) were created with the following values:

$$REPF(\tilde{h}, g) = \begin{cases} 0 & \text{if the person is in VARSTRAT} = \tilde{h} \text{ and } VARUNIT = g \\ \dfrac{n_{\tilde{h}}}{n_{\tilde{h}} - 1} & \text{if the person is in VARSTRAT} = \tilde{h} \text{ and } VARUNIT \neq g \\ 1 & \text{if the person is in VARSTRAT} \neq \tilde{h} \end{cases}$$

where

$n_{\tilde{h}}$ = the number of *VARUNIT*s in *VARSTRAT* = $\tilde{h}$.

The replicate base weight is the product of *REPF* $(\tilde{h}, g)$ and the full-sample base weight.

The assignment of *VARSTRAT* for the design strata is recorded in Appendix Table B-2. It shows the achieved sampling rate, the actual *fpc*, and the overall *fpc* used in each stratum.

Calculation of Response Rates

Several rates for the WGR2002 have been computed in accordance with the standards defined by the Council of American Survey Research Organizations (CASRO, 1982). The rates are referred to as:

- Location rate (*LR*);
- Completion rate (*CR*); and
- Response rate (*RR*).

These quantities were computed in such a way that *RR* = *LR* * *CR*. The rates are adjusted, as described below, to account for the fact that the eligibility of some units is unknown.

The *location rate* used for the WGR2002 survey is

$$LR = \frac{\text{adjusted located sample}}{\text{adjusted eligible sample}} = \frac{N_L}{N_E}.$$

The *completion rate* is defined as

$$CR = \frac{\text{usable responses}}{\text{adjusted located sample}} = \frac{N_R}{N_L}.$$

The *response rate* is defined as

$$RR = \frac{\text{usable responses}}{\text{adjusted eligible sample}} = \frac{N_R}{N_E}.$$

where,

- N_L = Adjusted located sample
- N_E = Adjusted eligible sample
- N_R =Usable responses.

The adjustments account for the fact that the eligibility status of some persons is unknown so that the proportion of eligibles among the unknowns must be estimated. An assumption in these calculations is that there are ineligibles among the persons with unknown disposition (ELIG = *UNK*). That is, the updated frame file is assumed to properly identify all other ineligibles. To facilitate computation of the CASRO rates, a separate code (CAS_ELIG) was created that identified cases that contributed to the components of LR, CR, and RR, as defined in Table 21.

Table 22.
Disposition Codes for CASRO Response Rates (CAS_ELIG)

Eligibility Code for CASRO Response Rates *(CAS_ELIG)*	FLAG_FIN Values	Weighting Eligibility Code *(ELIG_R)*	COMP FLAG	Sample Cases	Sum of Weights	Description
ER	1, 7, 8	*ER*	1	19,960	455,042	Eligible Respondent (Usable)
ENR_NOQCOMP	1, 7, 8	*ENR*	0	856	20,553	Eligible Nonrespondent (Questionnaire not Completed)
ENR_BLANK	15, 16, 17, 24, 25	*ENR*	0, .B	164	4,684	Eligible Nonrespondent (Returned Blank Questionnaire)
ENR_ACTIVE	14, 23	*ENR*	0, .B	17	271	Eligible Nonrespondent (Active Refusal)
IN_PR	2, 3, 6, 9, 10, 13, 18, 19, 22	*IN_PR*	NA	22	330	Proxy-Reported Ineligible
UNK_NOLOC	27, 28, 29	*UNK*	NA	1,320	35,765	Unknown Eligibility (Nonlocatable Member)
UNK_NORET	26	*UNK*	NA	32,173	745,202	Unknown Eligibility (Questionnaire not Returned)
IN_FR	30	*IN_FR*	NA	5,903	129,087	Ineligible Member in Updated Frame File
Total				60,415	1,390,935	

NA – Not applicable

The expressions for the numbers of located persons, eligible persons, and usable responses in terms of CAS_ELIG are given below. As a notational shorthand, CAS_ELIG codes are used to stand for counts of persons in the formulas. For example, *ER* denotes the count of eligible respondents.

$$N_L = (\text{Eligible respondents}) + (\text{Eligible nonrespondents}) + \text{ (Estimate of eligibles among unknowns who were located but did not return a questionnaire)}$$

$$= ER + ENR + UNK\_NORET \cdot \left(\frac{ER + ENR}{ER + ENR + IN\_PR} \right)$$

$$= ER + ENR + UNK\_NORET \cdot P\_E$$

where $P\_E = \dfrac{ER + ENR}{ER + ENR + IN\_PR}$ and

$$ENR = ENR\_NOQCOMP + ENR\_BLANK + ENR\_ACTIVE.$$

N_E = (Eligible respondents) + (Estimate of eligibles among all unknowns)

$$= ER + ENR + (UNK\_NORET + UNK\_NOLOC) \cdot \left(\frac{ER + ENR}{ER + ENR + IN\_PR} \right)$$

$$= ER + ENR + UNK \cdot P\_E$$

where $UNK = UNK\_NORET + UNK\_NOLOC.$

$N_R = (\text{Usable responses})$

$= ER.$

The adjusted located count, N_L, and the adjusted eligible count, N_E, can also be expressed by subtracting various counts from the total sample as shown below. DMDC has used this method (see below) on earlier surveys.

N_E = Adjusted eligible sample

= (Total sample)

– (Known ineligibles)

– (Estimate of proxy-reported ineligibles among non-located unknowns)

– (Estimate of proxy-reported ineligibles among other unknowns)

$$= TOTAL - (IN\_FR + IN\_PR) - (UNK\_NOLOC + UNK\_NORET) \cdot \frac{IN\_PR}{ER + ENR + IN\_PR}$$

$$= ER + ENR + UNK \cdot P\_E$$

using the facts that

$$TOTAL = ER + ENR + IN\_FR + IN\_PR + UNK\_NOLOC + UNK\_NORET$$

and $IN\_PR / (ER + ENR + IN\_PR) = 1 - P\_E.$

N_L = Adjusted located sample

= (Total sample)

– (Known ineligibles)

– (Non-located unknowns)

– (Estimate of proxy-reported ineligibles among other unknowns)

$$= TOTAL - (IN\_FR + IN\_PR) - UNK\_NOLOC - UNK\_NORET \cdot \left(\frac{IN\_PR}{ER + ENR + IN\_PR} \right)$$

$$= ER + ENR + UNK\_NORET \cdot P\_E$$

Both base-weighted and unweighted location, completion, and response rates were calculated for the strata used in the sample design and are shown in Table B-4 in Appendix B. Base-weighted and unweighted rates are also reported for the full sample and summary rates for Service, gender, paygrade group, race/ethnicity, occupational PERSTEMPO status, and age groups as shown in Table 23.

Table 23.
Unweighted and Weighted Location, Completion, and Response Rates for the Full Sample and Categories of Service, Paygrade Group, Gender, Race/Ethnicity, and Occupational PERSTEMPO Status

				Unweighted			Base-Weighted		
Group	Adjusted Eligible Sample	Adjusted Located Sample	Complete Responses	Location Rate	Completion Rate	Response Rate	Location Rate	Completion Rate	Response Rate
Full Sample	54,455	53,136	19,960	98%	38%	37%	97%	37%	36%
Service									
Army	14,574	14,026	4,984	96	36	34	96	35	33
Navy	11,125	10,847	4,164	97	38	37	97	38	37
Marine Corps	9,709	9,396	3,063	97	33	32	96	28	27
Air Force	15,271	15,126	6,101	99	40	40	99	43	43
Coast Guard	3,775	3,742	1,648	99	44	44	99	44	43
Gender									
Male	29,262	28,478	10,254	97	36	35	97	37	36
Female	25,191	24,657	9,706	98	39	39	98	39	38
Paygrade Group									
Unknown	3	3	1	100	33	33	100	33	33
E1 - E3	15,003	14,215	3,448	95	24	23	94	22	21
E4	10,527	10,272	2,758	98	27	26	97	26	25
E5 - E6	14,091	13,939	5,265	99	38	37	99	38	37
E7 - E9	4,820	4,792	2,577	99	54	53	99	56	55
W1 - W5	1,286	1,274	743	99	58	58	99	59	58
O1 - O3	4,839	4,772	2,603	99	55	54	98	54	53
O4 - O6	3,890	3,873	2,565	100	66	66	99	67	67

Table 23. (continued)

Group	Adjusted Eligible Sample	Adjusted Located Sample	Complete Responses	Unweighted Location Rate	Unweighted Completion Rate	Unweighted Response Rate	Base-Weighted Location Rate	Base-Weighted Completion Rate	Base-Weighted Response Rate
Race/Ethnicity									
Unknown	371	362	152	98%	42%	41%	98%	42%	41%
Minority	25,500	24,869	7,869	98	32	31	97	31	30
Non-Minority	28,585	27,906	11,939	98	43	42	97	41	39
PERSTEMPO									
Unknown	70	67	37	96	55	53	96	55	53
.321-2.58 Mo	22,333	21,833	9,491	98	43	42	97	43	42
2.59-4.86 Mo	32,052	31,236	10,432	97	33	33	97	34	33
Age Groups									
Less Than 20	4,899	4,554	1,104	93	24	23	92	22	20
20-24	18,463	17,856	4,780	97	27	26	96	25	24
25-29	10,222	10,036	3,563	98	36	35	98	34	33
30-34	7,652	7,561	3,258	99	43	43	99	43	43
35-39	7,602	7,539	3,834	99	51	50	99	51	51
40-44	3,922	3,902	2,286	99	59	58	99	60	60
More Than 44	1,693	1,685	1,133	100	67	67	100	68	68
Unknown	9	9	2	100	22	22	100	18	18
Collapsed Race/Ethnicity									
Hispanic	5,821	5,651	1,849	97	33	32	96	32	31
Black, non-Hispanic	15,743	15,382	4,428	98	29	28	97	27	27
Other	32,891	32,102	13,683	98	43	42	97	40	39

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Appendix A.
Sampling Data Tables

Table A-1.
Population Size, Sample Size and Stratum Definition for the WGR2002

Stratum	Service	Gender	Paygrade Group	Race/Ethnicity	Occupational PERSTEMPO	Population Size	Sample Size
001	Army	Male	E1-E3	Non-Minority	Low	6,929	127
002	Army	Male	E1-E3	Non-Minority	High	53,528	1,054
003	Army	Male	E1-E3	Minority	Low	5,805	125
004	Army	Male	E1-E3	Minority	High	30,907	693
005	Army	Male	E4	Non-Minority	Low	8,093	157
006	Army	Male	E4	Non-Minority	High	42,408	794
007	Army	Male	E4	Minority	Low	6,808	144
008	Army	Male	E4	Minority	High	26,490	617
009	Army	Male	E5-E6	Non-Minority	Low	10,370	166
010	Army	Male	E5-E6	Non-Minority	High	50,598	816
011	Army	Male	E5-E6	Minority	Low	9,645	177
012	Army	Male	E5-E6	Minority	High	39,155	756
013	Army	Male	E7-E9	Non-Minority	Low	5,037	59
014	Army	Male	E7-E9	Non-Minority	High	17,529	241
015	Army	Male	E7-E9	Minority	Low	5,194	71
016	Army	Male	E7-E9	Minority	High	16,583	276
017	Army	Male	W1-W5	Non-Minority	Low	2,707	112
018	Army	Male	W1-W5	Non-Minority	High	5,100	228
019	Army	Male	W1-W5	Minority	Low	1,362	58
020	Army	Male	W1-W5	Minority	High	1,228	62
021	Army	Male	O1-O3	Non-Minority	Low	12,566	162
022	Army	Male	O1-O3	Non-Minority	High	11,280	154
024	Army	Male	O1-O3	Minority	High	2,655	49
023	Army	Male	O1-O3	Minority	Low	3,914	68
025	Army	Male	O4-O6	Non-Minority	Low	11,860	272
026	Army	Male	O4-O6	Non-Minority	High	7,524	165
028	Army	Male	O4-O6	Minority	High	1,096	26
027	Army	Male	O4-O6	Minority	Low	2,838	72
029	Army	Female	E1-E3	Non-Minority	Low	3,274	329
030	Army	Female	E1-E3	Non-Minority	High	5,871	665
031	Army	Female	E1-E3	Minority	Low	4,520	575
032	Army	Female	E1-E3	Minority	High	7,277	922
033	Army	Female	E4	Non-Minority	Low	3,217	321
034	Army	Female	E4	Non-Minority	High	3,669	356
035	Army	Female	E4	Minority	Low	4,833	605
036	Army	Female	E4	Minority	High	5,305	662
037	Army	Female	E5-E6	Non-Minority	Low	2,587	244
038	Army	Female	E5-E6	Non-Minority	High	2,745	271
039	Army	Female	E5-E6	Minority	Low	5,823	715
040	Army	Female	E5-E6	Minority	High	6,736	903
041	Army	Female	E7-E9	Non-Minority	Low	877	70
042	Army	Female	E7-E9	Non-Minority	High	576	44
043	Army	Female	E7-E9	Minority	Low	2,206	227
044	Army	Female	E7-E9	Minority	High	1,970	244
045	Army	Female	W1-W5	Non-Minority	Low	248	127

Table A-1. (continued)

Stratum	Service	Gender	Paygrade Group	Race/Ethnicity	Occupational PERSTEMPO (months)	Population Size	Sample Size
046	Army	Female	W1-W5	Non-Minority	High	132	71
047	Army	Female	W1-W5	Minority	Low	307	169
048	Army	Female	W1-W5	Minority	High	91	60
049	Army	Female	O1-O3	Non-Minority	Low	3,785	315
050	Army	Female	O1-O3	Non-Minority	High	424	43
051	Army	Female	O1-O3	Minority	Low	2,182	280
052	Army	Female	O1-O3	Minority	High	156	22
053	Army	Female	O4-O6	Non-Minority	Low	2,196	346
054	Army	Female	O4-O6	Non-Minority, Minority	High	188	32
055	Army	Female	O4-O6	Minority	Low	979	175
056	Navy	Male	E1-E3	Non-Minority	Low	15,790	287
057	Navy	Male	E1-E3	Non-Minority	High	27,012	582
058	Navy	Male	E1-E3	Minority	Low	14,788	315
059	Navy	Male	E1-E3	Minority	High	20,022	529
060	Navy	Male	E4	Non-Minority	Low	4,682	83
062	Navy	Male	E4	Minority	Low	4,263	88
061	Navy	Male	E4	Non-Minority	High	26,491	454
063	Navy	Male	E4	Minority	High	17,369	387
064	Navy	Male	E5-E6	Non-Minority	Low	13,398	189
065	Navy	Male	E5-E6	Non-Minority	High	55,306	637
066	Navy	Male	E5-E6	Minority	Low	9,186	169
067	Navy	Male	E5-E6	Minority	High	29,793	533
068	Navy	Male	E7-E9	Non-Minority	Low	5,014	99
069	Navy	Male	E7-E9	Non-Minority	High	16,712	328
070	Navy	Male	E7-E9	Minority	Low	2,196	55
071	Navy	Male	E7-E9	Minority	High	5,192	136
072	Navy	Male	W1-W5	Non-Minority	Low	846	37
073	Navy	Male	W1-W5	Non-Minority	High	407	20
074	Navy	Male	W1-W5	Minority	Low	278	14
075	Navy	Male	W1-W5	Minority	High	112	6
076	Navy	Male	O1-O3	Non-Minority	Low	13,571	261
077	Navy	Male	O1-O3	Non-Minority	High	7,618	155
079	Navy	Male	O1-O3	Minority	High	1,554	40
078	Navy	Male	O1-O3	Minority	Low	3,334	76
080	Navy	Male	O4-O6	Non-Minority	Low	9,291	241
081	Navy	Male	O4-O6	Non-Minority	High	6,430	163
083	Navy	Male	O4-O6	Minority	High	561	17
082	Navy	Male	O4-O6	Minority	Low	1,244	36
084	Navy	Female	E1-E3	Non-Minority	Low	3,540	378
085	Navy	Female	E1-E3	Non-Minority	High	4,481	487
086	Navy	Female	E1-E3	Minority	Low	4,325	524
087	Navy	Female	E1-E3	Minority	High	5,263	647
088	Navy	Female	E4	Non-Minority	Low	1,944	187
089	Navy	Female	E4	Non-Minority	High	3,275	257
090	Navy	Female	E4	Minority	Low	2,329	242
091	Navy	Female	E4	Minority	High	3,286	299
092	Navy	Female	E5-E6	Non-Minority	Low	2,678	306
093	Navy	Female	E5-E6	Non-Minority	High	3,358	299

Table A-1. (continued)

Stratum	Service	Gender	Paygrade Group	Race/Ethnicity	Occupational PERSTEMPO (months)	Population Size	Sample Size
094	Navy	Female	E5-E6	Minority	Low	2,718	360
095	Navy	Female	E5-E6	Minority	High	3,372	363
096	Navy	Female	E7-E9	Non-Minority	Low	839	189
097	Navy	Female	E7-E9	Non-Minority	High	693	160
098	Navy	Female	E7-E9	Minority	Low	406	102
099	Navy	Female	E7-E9	Minority	High	286	76
100	Navy	Female	W1-W5	Non-Minority, Minority	Low, High	84	46
101	Navy	Female	O1-O3	Non-Minority	Low	3,149	402
102	Navy	Female	O1-O3	Non-Minority	High	522	65
103	Navy	Female	O1-O3	Minority	Low	1,167	178
104	Navy	Female	O1-O3	Minority	High	140	22
105	Navy	Female	O4-O6	Non-Minority	Low	2,241	443
106	Navy	Female	O4-O6	Non-Minority, Minority	High	105	22
107	Navy	Female	O4-O6	Minority	Low	481	106
108	Marine Corps	Male	E1-E3	Non-Minority	Low	12,411	346
110	Marine Corps	Male	E1-E3	Minority	Low	5,443	174
109	Marine Corps	Male	E1-E3	Non-Minority	High	33,714	1,074
111	Marine Corps	Male	E1-E3	Minority	High	16,112	590
112	Marine Corps	Male	E4	Non-Minority	Low	2,027	106
114	Marine Corps	Male	E4	Minority	Low	987	57
113	Marine Corps	Male	E4	Non-Minority	High	16,072	776
115	Marine Corps	Male	E4	Minority	High	7,457	436
116	Marine Corps	Male	E5-E6	Non-Minority	Low	2,718	95
118	Marine Corps	Male	E5-E6	Minority	Low	1,390	50
117	Marine Corps	Male	E5-E6	Non-Minority	High	19,394	615
119	Marine Corps	Male	E5-E6	Minority	High	10,956	412
120	Marine Corps	Male	E7-E9	Non-Minority	Low	1,127	57
122	Marine Corps	Male	E7-E9	Minority	Low	441	24
123	Marine Corps	Male	E7-E9	Minority	High	4,527	247
121	Marine Corps	Male	E7-E9	Non-Minority	High	6,779	332
124	Marine Corps	Male	W1-W5	Non-Minority	Low	1,171	64
125	Marine Corps	Male	W1-W5	Non-Minority	High	218	14
126	Marine Corps	Male	W1-W5	Minority	Low	382	24
127	Marine Corps	Male	W1-W5	Minority	High	65	5
128	Marine Corps	Male	O1-O3	Non-Minority	Low	4,210	261
130	Marine Corps	Male	O1-O3	Minority	Low	1,144	79
129	Marine Corps	Male	O1-O3	Non-Minority	High	3,596	222
131	Marine Corps	Male	O1-O3	Minority	High	530	38
132	Marine Corps	Male	O4-O6	Non-Minority	Low	2,469	217
134	Marine Corps	Male	O4-O6	Minority	Low	311	29
133	Marine Corps	Male	O4-O6	Non-Minority	High	2,627	214
135	Marine Corps	Male	O4-O6	Minority	High	223	20
136	Marine Corps	Female	E1-E3	Non-Minority	Low	1,006	200
138	Marine Corps	Female	E1-E3	Minority	Low	571	141
137	Marine Corps	Female	E1-E3	Non-Minority	High	1,591	401
139	Marine Corps	Female	E1-E3	Minority	High	1,337	380
140	Marine Corps	Female	E4	Non-Minority	Low	215	101

Table A-1. (continued)

Stratum	Service	Gender	Paygrade Group	Race/Ethnicity	Occupational PERSTEMPO (months)	Population Size	Sample Size
142	Marine Corps	Female	E4	Minority	Low	164	88
141	Marine Corps	Female	E4	Non-Minority	High	868	404
143	Marine Corps	Female	E4	Minority	High	732	419
144	Marine Corps	Female	E5-E6	Non-Minority	Low	258	124
145	Marine Corps	Female	E5-E6	Non-Minority	High	804	383
146	Marine Corps	Female	E5-E6	Minority	Low	200	103
147	Marine Corps	Female	E5-E6	Minority	High	904	557
148	Marine Corps	Female	E7-E9	Non-Minority	Low	106	75
150	Marine Corps	Female	E7-E9	Minority	Low	52	39
149	Marine Corps	Female	E7-E9	Non-Minority	High	235	162
151	Marine Corps	Female	E7-E9	Minority	High	272	212
152	Marine Corps	Female	W1-W5	Non-Minority, Minority	Low, High	124	84
153	Marine Corps	Female	O1-O3	Non-Minority	Low	425	308
154	Marine Corps	Female	O1-O3	Non-Minority, Minority	High	73	54
155	Marine Corps	Female	O1-O3	Minority	Low	149	123
156	Marine Corps	Female	O4-O6	Non-Minority, Minority	Low, High	158	120
157	Air Force	Male	E1-E3	Non-Minority	Low	15,577	150
158	Air Force	Male	E1-E3	Non-Minority	High	26,165	443
159	Air Force	Male	E1-E3	Minority	Low	6,188	671
160	Air Force	Male	E1-E3	Minority	High	8,985	1,047
161	Air Force	Male	E4	Non-Minority	Low	4,630	85
162	Air Force	Male	E4	Non-Minority	High	23,389	455
163	Air Force	Male	E4	Minority	Low	2,521	270
164	Air Force	Male	E4	Minority	High	8,161	957
165	Air Force	Male	E5-E6	Non-Minority	Low	16,678	240
166	Air Force	Male	E5-E6	Non-Minority	High	54,381	873
167	Air Force	Male	E5-E6	Minority	Low	6,929	560
168	Air Force	Male	E5-E6	Minority	High	14,695	1,273
169	Air Force	Male	E7-E9	Non-Minority	Low	6,301	82
170	Air Force	Male	E7-E9	Non-Minority	High	18,682	267
171	Air Force	Male	E7-E9	Minority	Low	2,817	198
172	Air Force	Male	E7-E9	Minority	High	5,857	440
173	Air Force	Male	O1-O3	Non-Minority	Low	20,796	369
174	Air Force	Male	O1-O3	Non-Minority	High	5,459	116
175	Air Force	Male	O1-O3	Minority	Low	3,191	271
176	Air Force	Male	O1-O3	Minority	High	408	44
177	Air Force	Male	O4-O6	Non-Minority	Low	17,646	321
178	Air Force	Male	O4-O6	Non-Minority	High	5,126	91
180	Air Force	Male	O4-O6	Minority	High	212	20
179	Air Force	Male	O4-O6	Minority	Low	2,238	189
181	Air Force	Female	E1-E3	Non-Minority	Low	6,787	484
182	Air Force	Female	E1-E3	Non-Minority	High	4,763	434
183	Air Force	Female	E1-E3	Minority	Low	4,495	381
184	Air Force	Female	E1-E3	Minority	High	2,927	330
185	Air Force	Female	E4	Non-Minority	Low	4,027	415
186	Air Force	Female	E4	Non-Minority	High	3,597	376

Table A-1. (continued)

Stratum	Service	Gender	Paygrade Group	Race/Ethnicity	Occupational PERSTEMPO (months)	Population Size	Sample Size
187	Air Force	Female	E4	Minority	Low	3,037	398
188	Air Force	Female	E4	Minority	High	2,114	297
189	Air Force	Female	E5-E6	Non-Minority	Low	6,529	556
190	Air Force	Female	E5-E6	Non-Minority	High	4,557	422
191	Air Force	Female	E5-E6	Minority	Low	4,077	513
192	Air Force	Female	E5-E6	Minority	High	2,538	344
193	Air Force	Female	E7-E9	Non-Minority	Low	1,346	171
194	Air Force	Female	E7-E9	Non-Minority	High	1,100	144
195	Air Force	Female	E7-E9	Minority	Low	984	144
196	Air Force	Female	E7-E9	Minority	High	571	92
197	Air Force	Female	O1-O3	Non-Minority	Low	5,640	398
198	Air Force	Female	O1-O3	Non-Minority, Minority	High	306	32
199	Air Force	Female	O1-O3	Minority	Low	1,542	155
200	Air Force	Female	O4-O6	Non-Minority	Low	3,056	473
201	Air Force	Female	O4-O6	Non-Minority, Minority	High	70	12
202	Air Force	Female	O4-O6	Minority	Low	745	128
203	Coast Guard	Male	E1-E3	Non-Minority	Low	3,524	360
204	Coast Guard	Male	E1-E3	Non-Minority	High	1,411	141
205	Coast Guard	Male	E1-E3	Minority	Low	620	64
206	Coast Guard	Male	E1-E3	Minority	High	275	29
207	Coast Guard	Male	E4	Non-Minority	Low	434	37
208	Coast Guard	Male	E4	Non-Minority	High	4,150	331
209	Coast Guard	Male	E4	Minority	Low	175	17
210	Coast Guard	Male	E4	Minority	High	848	79
211	Coast Guard	Male	E5-E6	Non-Minority	Low	984	50
212	Coast Guard	Male	E5-E6	Non-Minority	High	7,312	330
213	Coast Guard	Male	E5-E6	Minority	Low	376	20
214	Coast Guard	Male	E5-E6	Minority	High	1,610	80
215	Coast Guard	Male	E7-E9	Non-Minority	Low	351	18
216	Coast Guard	Male	E7-E9	Non-Minority	High	2,607	124
217	Coast Guard	Male	E7-E9	Minority	Low	75	6
218	Coast Guard	Male	E7-E9	Minority	High	351	19
219	Coast Guard	Male	W1-W5	Non-Minority	Low	817	80
220	Coast Guard	Male	W1-W5	Non-Minority	High	291	30
221	Coast Guard	Male	W1-W5	Minority	Low, High	150	17
222	Coast Guard	Male	O1-O3	Non-Minority	Low	1,219	105
223	Coast Guard	Male	O1-O3	Non-Minority	High	812	70
224	Coast Guard	Male	O1-O3	Minority	Low	254	25
225	Coast Guard	Male	O1-O3	Minority	High	129	13
226	Coast Guard	Male	O4-O6	Non-Minority	Low	1,054	92
227	Coast Guard	Male	O4-O6	Non-Minority	High	784	63
228	Coast Guard	Male	O4-O6	Minority	Low	73	7
229	Coast Guard	Male	O4-O6	Minority	High	53	5
230	Coast Guard	Female	E1-E3	Non-Minority	Low	501	317
231	Coast Guard	Female	E1-E3	Non-Minority, Minority	High	128	82
232	Coast Guard	Female	E1-E3	Minority	Low	110	74
233	Coast Guard	Female	E4	Non-Minority	Low	199	112

Table A-1. (continued)

Stratum	Service	Gender	Paygrade Group	Race/Ethnicity	Occupational PERSTEMPO (months)	Population Size	Sample Size
235	Coast Guard	Female	E4	Minority	Low	87	56
234	Coast Guard	Female	E4	Non-Minority	High	383	202
236	Coast Guard	Female	E4	Minority	High	99	63
237	Coast Guard	Female	E5-E6	Non-Minority	Low	314	168
238	Coast Guard	Female	E5-E6	Non-Minority	High	416	207
239	Coast Guard	Female	E5-E6	Minority	Low	158	93
240	Coast Guard	Female	E5-E6	Minority	High	157	91
241	Coast Guard	Female	E7-E9	Non-Minority, Minority	Low	93	54
242	Coast Guard	Female	E7-E9	Non-Minority, Minority	High	85	52
243	Coast Guard	Female	W1-W5	Non-Minority, Minority	Low, High	56	38
244	Coast Guard	Female	O1-O3	Non-Minority	Low	251	122
245	Coast Guard	Female	O1-O3	Non-Minority	High	124	61
246	Coast Guard	Female	O1-O3	Minority	Low, High	101	57
247	Coast Guard	Female	O4-O6	Non-Minority, Minority	Low	94	48
248	Coast Guard	Female	O4-O6	Non-Minority, Minority	High	60	27
249	All	All, Unknown	All, Unknown	All, Unknown	All, Unknown	11,670	501
	Total					1,390,935	60,415

Table A-2.
Domain Information from Sample Design for the Status of the Armed Forces Surveys–Workplace and Gender Relations (Form 2001GB)

Domain Number	Domain Size	Precision Constraint	Lagrange Ratio	Expected Precision	Design Effect	Domain Label
1	203,586	0.02	0	0.01	1.41	Female
2	1,187,371	0.02	0	0.01	1.48	Male
3	471,963	0.05	0	0.02	1.90	Army
4	365,639	0.05	0	0.02	1.94	Navy
5	170,099	0.05	0	0.02	2.27	Marine Corps
6	348,417	0.05	0	0.01	2.15	Air Force
7	34,842	0.05	0	0.03	1.93	Coast Guard
8	458,212		0	0.01	2.55	Low PERSTEMPO
9	930,709		0	0.01	1.91	High PERSTEMPO
10	111,897		0	0.01	1.40	Low*Female
11	91,348		0	0.01	1.41	High*Female
12	346,313		0	0.02	1.61	Low*Male
13	839,360		0	0.01	1.43	High*Male
14	72,261	0.03	0	0.02	1.18	Army*Female
15	51,077	0.03	0	0.02	1.34	Navy*Female
16	10,343	0.03	0	0.03	1.78	Marine Corps*Female
17	66,373	0.03	0	0.02	1.24	Air Force*Female
18	3,532	0.03	78	0.04	2.38	Coast Guard*Female
19	399,700	0.03	0	0.02	1.17	Army*Male
20	314,562	0.03	0	0.02	1.21	Navy*Male
21	159,756	0.03	0	0.02	1.46	Marine Corps*Male
22	282,043	0.03	0	0.02	1.76	Air Force*Male
23	31,310	0.03	46	0.03	1.18	Coast Guard*Male
24	107,249		0	0.01	1.30	E1-E3+E4*Female
25	64,003		0	0.01	1.31	E5-E6+E7-E9*Female
26	516,688		0	0.02	1.48	E1-E3+E4*Male
27	480,659		0	0.01	1.34	E5-E6+E7-E9*Male
28	63,418	0.03	0	0.02	1.24	E1-E3*Female
29	43,831	0.03	0	0.02	1.38	E4*Female
30	51,258	0.03	0	0.02	1.26	E5-E6*Female
31	12,745	0.03	0	0.03	1.38	E7-E9*Female
32	1,049	0.05	55	0.05	1.28	W1-W5*Female
33	20,790	0.03	1.81E-13	0.03	1.57	O1-O3*Female
34	10,491	0.03	0	0.03	1.27	O4-O6*Female
35	77,562		0	0.02	1.49	E4-E5*Female
36	30,272		0	0.02	1.88	E6-E9*Female
37	171,252		0	0.01	1.34	Enlisted*Female
38	1,049		0	0.05	1.28	WO*Female
39	31,281		0	0.02	1.58	CO*Female
40	32,330		0	0.02	1.64	Officers*Female
41	307,687	0.03	0	0.02	1.44	E1-E3*Male
42	209,001	0.03	0	0.02	1.50	E4*Male
43	356,750	0.03	0	0.02	1.32	E5-E6*Male
44	123,909	0.03	0	0.03	1.33	E7-E9*Male
45	15,213	0.05	64	0.05	1.13	W1-W5*Male
46	100,613	0.03	0	0.03	1.38	O1-O3*Male
47	74,173	0.03	0	0.03	1.31	O4-O6*Male

Table A-2. (continued)

Domain Number	Domain Size	Precision Constraint	Lagrange Ratio	Expected Precision	Design Effect	Domain Label
48	413,368		0	0.02	1.68	E4-E5*Male
49	276,292		0	0.02	1.78	E6-E9*Male
50	997,347		0	0.01	1.43	Enlisted*Male
51	15,213		0	0.05	1.13	WO*Male
52	174,786		0	0.02	1.38	CO*Male
53	189,999		0	0.02	1.37	Officers*Male
54	168,956		0	0.01	1.63	CONUS*Female
55	33,566		0	0.03	2.22	OCONUS*Female
56	170,607	0.05	0	0.01	1.62	US&Territories*Female
57	19,145	0.05	0	0.04	2.17	Europe*Female
58	12,111	0.05	79	0.05	2.49	API*Female
59	658		0	0.22	2.22	OtherLoc*Female
60	169,341	0.05	0	0.01	1.63	America*Female
61	18,779	0.05	0	0.04	2.17	Europe*Female
62	13,261	0.05	0	0.05	2.48	Pacific*Female
63	414		0	0.27	1.71	Central*Female
64	708		0	0.21	2.63	South*Female
65	998,451		0	0.01	1.70	CONUS*Male
66	177,909		0	0.03	2.58	OCONUS*Male
67	1,005,510	0.05	0	0.01	1.69	US&Territories*Male
68	89,655	0.05	1.45E-06	0.05	2.59	Europe*Male
69	76,950	0.05	72	0.05	2.76	API*Male
70	4,216		0	0.20	2.34	OtherLoc*Male
71	999,962	0.05	0	0.01	1.69	America*Male
72	88,319	0.05	1.36E-05	0.05	2.60	Europe*Male
73	80,992	0.05	0	0.05	2.77	Pacific*Male
74	3,024		0	0.25	1.99	Central*Male
75	3,935		0	0.21	2.36	South*Male
76	107,033		0	0.01	1.46	NonMinority*Female
77	94,633		0	0.01	1.28	Minority*Female
78	2,776		0	0.11	2.55	NHAIAN*Female
79	7,719		0	0.06	2.43	NHAPI*Female
80	65,070	0.05	0	0.02	1.60	NHBlack*Female
81	107,033	0.05	0	0.01	1.46	NHWhite*Female
82	16,790	0.05	0	0.04	2.35	Hispanic*Female
83	798,658		0	0.01	1.35	NonMinority*Male
84	381,014		0	0.02	1.72	Minority*Male
85	11,906		0	0.13	3.10	NHAIAN*Male
86	44,135		0	0.06	3.05	NHAPI*Male
87	212,690	0.05	0	0.03	2.49	NHBlack*Male
88	798,658	0.05	0	0.01	1.35	NHWhite*Male
89	100,102	0.05	0	0.04	2.79	Hispanic*Male
90	38,013	0.05	0	0.02	1.15	E1-E3+E4*Female*Army
91	23,525	0.05	0	0.03	1.05	E5-E6+E7-E9*Female*Army
92	181,208	0.05	0	0.03	1.14	E1-E3+E4*Male*Army
93	154,160	0.05	0	0.03	1.05	E5-E6+E7-E9*Male*Army
94	20,980	0.05	0	0.03	1.13	E1-E3*Female*Army
95	17,033		0	0.04	1.16	E4*Female*Army
96	17,895		0	0.03	1.05	E5-E6*Female*Army
97	5,630		0	0.05	1.04	E7-E9*Female*Army
98	780		0	0.06	1.11	W1-W5*Female*Army

Table A-2. (continued)

Domain Number	Domain Size	Precision Constraint	Lagrange Ratio	Expected Precision	Design Effect	Domain Label
99	6,566		0	0.05	1.06	O1-O3*Female*Army
100	3,376	0.05	57	0.05	1.10	O4-O6*Female*Army
101	28,205		0	0.03	1.26	E4-E5*Female*Army
102	12,353		0	0.04	1.41	E6-E9*Female*Army
103	61,538	0.05	0	0.02	1.12	Enlisted*Female*Army
104	780		0	0.06	1.11	WO*Female*Army
105	9,942		0	0.04	1.16	CO*Female*Army
106	10,722	0.05	0	0.03	1.33	Officers*Female*Army
107	97,349		0	0.04	1.11	E1-E3*Male*Army
108	83,859		0	0.04	1.18	E4*Male*Army
109	109,808		0	0.03	1.05	E5-E6*Male*Army
110	44,352		0	0.05	1.05	E7-E9*Male*Army
111	10,420		0	0.06	1.04	W1-W5*Male*Army
112	30,510		0	0.06	1.02	O1-O3*Male*Army
113	23,396	0.05	66	0.05	1.03	O4-O6*Male*Army
114	144,524		0	0.03	1.32	E4-E5*Male*Army
115	93,495		0	0.04	1.35	E6-E9*Male*Army
116	335,368	0.05	0	0.02	1.12	Enlisted*Male*Army
117	10,420		0	0.06	1.04	WO*Male*Army
118	53,906		0	0.04	1.12	CO*Male*Army
119	64,326	0.05	0	0.03	1.18	Officers*Male*Army
120	57,587		0	0.02	1.40	CONUS*Female*Army
121	14,632		0	0.05	2.03	OCONUS*Female*Army
122	57,692		0	0.02	1.40	US&Territories*Female*Army
123	9,638		0	0.06	2.10	Europe*Female*Army
124	4,706		0	0.08	2.16	API*Female*Army
125	183		0	0.41	2.05	OtherLoc*Female*Army
126	57,587		0	0.02	1.40	America*Female*Army
127	9,640		0	0.06	2.10	Europe*Female*Army
128	4,729		0	0.08	2.16	Pacific*Female*Army
129	159		0	0.45	1.74	Central*Female*Army
130	102		0	0.54	1.23	South*Female*Army
131	320,707		0	0.02	1.38	CONUS*Male*Army
132	78,815		0	0.05	2.03	OCONUS*Male*Army
133	321,525		0	0.02	1.38	US&Territories*Male*Army
134	51,251		0	0.07	2.10	Europe*Male*Army
135	25,517		0	0.10	2.15	API*Male*Army
136	1,203		0	0.40	1.82	OtherLoc*Male*Army
137	320,709		0	0.02	1.38	America*Male*Army
138	51,275		0	0.07	2.10	Europe*Male*Army
139	25,643		0	0.10	2.16	Pacific*Male*Army
140	906		0	0.47	1.37	Central*Male*Army
141	959		0	0.45	1.66	South*Male*Army
142	29,745		0	0.03	1.24	NonMinority*Female*Army
143	42,438		0	0.02	1.14	Minority*Female*Army
144	816		0	0.21	2.16	NHAIAN*Female*Army
145	2,546		0	0.11	2.12	NHAPI*Female*Army
146	31,259		0	0.03	1.42	NHBlack*Female*Army
147	29,745		0	0.03	1.24	NHWhite*Female*Army
148	6,030		0	0.07	2.03	Hispanic*Female*Army
149	245,589		0	0.02	1.20	NonMinority*Male*Army

Table A-2. (continued)

Domain Number	Domain Size	Precision Constraint	Lagrange Ratio	Expected Precision	Design Effect	Domain Label
150	153,703		0	0.03	1.13	Minority*Male*Army
151	3,054		0	0.28	2.30	NHAIAN*Male*Army
152	12,304		0	0.14	2.10	NHAPI*Male*Army
153	93,671		0	0.04	1.52	NHBlack*Male*Army
154	245,589		0	0.02	1.20	NHWhite*Male*Army
155	34,935		0	0.08	1.92	Hispanic*Male*Army
156	28,647	0.05	0	0.03	1.15	E1-E3+E4*Female*Navy
157	14,405	0.05	0	0.03	1.18	E5-E6+E7-E9*Female*Navy
158	131,399	0.05	0	0.03	1.13	E1-E3+E4*Male*Navy
159	137,279	0.05	0	0.03	1.09	E5-E6+E7-E9*Male*Navy
160	17,747	0.05	0	0.04	1.14	E1-E3*Female*Navy
161	10,900		0	0.05	1.15	E4*Female*Navy
162	12,170		0	0.03	1.07	E5-E6*Female*Navy
163	2,235	0.05	48	0.05	1.08	E7-E9*Female*Navy
164	88		0	0.27	2.41	W1-W5*Female*Navy
165	5,042	0.04	44	0.05	1.16	O1-O3*Female*Navy
166	2,892	0.04	47	0.05	1.37	O4-O6*Female*Navy
167	18,663	0.05	0	0.03	1.29	E4-E5*Female*Navy
168	6,642	0.05	42	0.05	1.86	E6-E9*Female*Navy
169	43,052	0.05	0	0.02	1.24	Enlisted*Female*Navy
170	88		0	0.27	2.41	WO*Female*Navy
171	7,934		0	0.03	1.30	CO*Female*Navy
172	8,022	0.05	0	0.03	1.31	Officers*Female*Navy
173	78,247	0.05	1.23E-10	0.05	1.11	E1-E3*Male*Navy
174	53,152	0.05	8	0.05	1.13	E4*Male*Navy
175	108,053	0.05	0	0.03	1.06	E5-E6*Male*Navy
176	29,226	0.05	52	0.05	1.02	E7-E9*Male*Navy
177	1,688		0	0.16	1.07	W1-W5*Male*Navy
178	26,434	0.05	54	0.05	1.04	O1-O3*Male*Navy
179	17,745	0.05	64	0.05	1.03	O4-O6*Male*Navy
180	113,478		0	0.04	1.34	E4-E5*Male*Navy
181	76,953		0	0.04	1.53	E6-E9*Male*Navy
182	268,678	0.05	0	0.02	1.13	Enlisted*Male*Navy
183	1,688		0	0.16	1.07	WO*Male*Navy
184	44,179		0	0.04	1.07	CO*Male*Navy
185	45,867	0.05	0	0.04	1.08	Officers*Male*Navy
186	44,115		0	0.02	1.50	CONUS*Female*Navy
187	6,848		0	0.07	2.32	OCONUS*Female*Navy
188	45,296		0	0.02	1.47	US&Territories*Female*Navy
189	2,951		0	0.11	2.42	Europe*Female*Navy
190	2,335		0	0.12	2.40	API*Female*Navy
191	381		0	0.29	2.26	OtherLoc*Female*Navy
192	44,385		0	0.02	1.49	America*Female*Navy
193	2,684		0	0.11	2.43	Europe*Female*Navy
194	3,141		0	0.10	2.38	Pacific*Female*Navy
195	209		0	0.39	1.87	Central*Female*Navy
196	542		0	0.24	2.60	South*Female*Navy
197	280,674		0	0.02	1.32	CONUS*Male*Navy
198	33,225		0	0.08	2.19	OCONUS*Male*Navy
199	284,763		0	0.02	1.31	US&Territories*Male*Navy
200	9,733		0	0.15	2.27	Europe*Male*Navy

Table A-2. (continued)

Domain Number	Domain Size	Precision Constraint	Lagrange Ratio	Expected Precision	Design Effect	Domain Label
201	17,711		0	0.11	2.23	API*Male*Navy
202	1,692		0	0.35	2.13	OtherLoc*Male*Navy
203	281,461		0	0.02	1.32	America*Male*Navy
204	8,954		0	0.15	2.27	Europe*Male*Navy
205	20,126		0	0.10	2.25	Pacific*Male*Navy
206	1,332		0	0.39	1.94	Central*Male*Navy
207	2,025		0	0.32	1.83	South*Male*Navy
208	26,877		0	0.02	1.35	NonMinority*Female*Navy
209	23,812		0	0.03	1.22	Minority*Female*Navy
210	1,304		0	0.18	2.18	NHAIAN*Female*Navy
211	2,568		0	0.11	2.27	NHAPI*Female*Navy
212	14,520		0	0.04	1.67	NHBlack*Female*Navy
213	26,877		0	0.02	1.35	NHWhite*Female*Navy
214	5,253		0	0.08	2.06	Hispanic*Female*Navy
215	202,583		0	0.02	1.23	NonMinority*Male*Navy
216	109,902		0	0.03	1.14	Minority*Male*Navy
217	5,560		0	0.21	2.15	NHAIAN*Male*Navy
218	20,423		0	0.10	2.00	NHAPI*Male*Navy
219	54,075		0	0.06	1.68	NHBlack*Male*Navy
220	202,583		0	0.02	1.23	NHWhite*Male*Navy
221	29,003		0	0.08	1.91	Hispanic*Male*Navy
222	6,539	0.05	0	0.04	1.28	E1-E3+E4*Female*Marine Corps
223	2,863	0.05	0	0.04	1.45	E5-E6+E7-E9*Female*Marine Corps
224	94,964	0.05	0	0.03	1.13	E1-E3+E4*Male*Marine Corps
225	47,758	0.05	0	0.03	1.11	E5-E6+E7-E9*Male*Marine Corps
226	4,542	0.05	34	0.05	1.09	E1-E3*Female*Marine Corps
227	1,997	0.05	61	0.05	1.22	E4*Female*Marine Corps
228	2,191	0.05	0	0.04	1.33	E5-E6*Female*Marine Corps
229	672	0.05	13	0.06	1.60	E7-E9*Female*Marine Corps
230	125		0	0.17	1.21	W1-W5*Female*Marine Corps
231	657	0.05	45	0.06	2.11	O1-O3*Female*Marine Corps
232	159	0.08	27	0.09	1.76	O4-O6*Female*Marine Corps
233	3,417	0.05	0	0.04	1.39	E4-E5*Female*Marine Corps
234	1,443	0.05	63	0.05	2.07	E6-E9*Female*Marine Corps
235	9,402	0.05	0	0.03	1.60	Enlisted*Female*Marine Corps
236	125		0	0.17	1.21	WO*Female*Marine Corps
237	816	0.05	0	0.05	2.09	CO*Female*Marine Corps
238	941	0.05	7.73E-05	0.05	2.00	Officers*Female*Marine Corps
239	68,150		0	0.04	1.04	E1-E3*Male*Marine Corps
240	26,814	0.05	61	0.05	1.06	E4*Male*Marine Corps
241	34,795	0.05	0	0.04	1.03	E5-E6*Male*Marine Corps
242	12,963	0.05	41	0.05	1.01	E7-E9*Male*Marine Corps
243	1,847		0	0.15	1.00	W1-W5*Male*Marine Corps
244	9,546	0.05	72	0.05	1.03	O1-O3*Male*Marine Corps
245	5,641	0.05	79	0.05	1.04	O4-O6*Male*Marine Corps
246	47,927	0.05	0	0.04	1.22	E4-E5*Male*Marine Corps
247	26,645	0.05	45	0.05	1.57	E6-E9*Male*Marine Corps
248	142,722	0.05	0	0.03	1.24	Enlisted*Male*Marine Corps
249	1,847		0	0.15	1.00	WO*Male*Marine Corps
250	15,187	0.05	0	0.04	1.10	CO*Male*Marine Corps
251	17,034	0.05	0	0.04	1.15	Officers*Male*Marine Corps

Table A-2. (continued)

Domain Number	Domain Size	Precision Constraint	Lagrange Ratio	Expected Precision	Design Effect	Domain Label
252	8,674		0	0.03	2.07	CONUS*Female*Marine Corps
253	1,184		0	0.10	2.98	OCONUS*Female*Marine Corps
254	8,675		0	0.03	2.07	US&Territories*Female*Marine Corps
255	34		0	0.50	2.27	Europe*Female*Marine Corps
256	1,129		0	0.11	3.00	API*Female*Marine Corps
257	20		0	0.69	1.65	OtherLoc*Female*Marine Corps
258	8,674		0	0.03	2.07	America*Female*Marine Corps
259	38		0	0.47	1.95	Europe*Female*Marine Corps
260	1,129		0	0.11	3.00	Pacific*Female*Marine Corps
261	16		0	0.79	1.39	Central*Female*Marine Corps
262	136,201		0	0.03	1.67	CONUS*Male*Marine Corps
263	16,446		0	0.10	2.64	OCONUS*Male*Marine Corps
264	136,215		0	0.03	1.67	US&Territories*Male*Marine Corps
265	1,093		0	0.34	2.87	Europe*Male*Marine Corps
266	14,818		0	0.10	2.63	API*Male*Marine Corps
267	520		0	0.51	2.52	OtherLoc*Male*Marine Corps
268	136,252		0	0.03	1.67	America*Male*Marine Corps
269	1,148		0	0.32	2.79	Europe*Male*Marine Corps
270	14,818		0	0.10	2.63	Pacific*Male*Marine Corps
271	369		0	0.63	2.09	Central*Male*Marine Corps
272	51		0			South*Male*Marine Corps
273	5,800		0	0.03	1.75	NonMinority*Female*Marine Corps
274	4,466		0	0.04	1.54	Minority*Female*Marine Corps
275	171		0	0.29	2.75	NHAIAN*Female*Marine Corps
276	339		0	0.20	2.91	NHAPI*Female*Marine Corps
277	2,265		0	0.07	2.33	NHBlack*Female*Marine Corps
278	5,800		0	0.03	1.75	NHWhite*Female*Marine Corps
279	1,606		0	0.09	2.31	Hispanic*Female*Marine Corps
280	108,642		0	0.03	1.51	NonMinority*Male*Marine Corps
281	49,972		0	0.04	1.32	Minority*Male*Marine Corps
282	1,447		0	0.35	2.37	NHAIAN*Male*Marine Corps
283	3,828		0	0.21	2.65	NHAPI*Male*Marine Corps
284	23,433		0	0.07	2.04	NHBlack*Male*Marine Corps
285	108,642		0	0.03	1.51	NHWhite*Male*Marine Corps
286	20,430		0	0.08	1.98	Hispanic*Male*Marine Corps
287	32,543	0.05	0	0.03	1.24	E1-E3+E4*Female*Air Force
288	21,987	0.05	0	0.03	1.12	E5-E6+E7-E9*Female*Air Force
289	97,674	0.05	0	0.03	2.31	E1-E3+E4*Male*Air Force
290	127,796	0.05	0	0.02	1.60	E5-E6+E7-E9*Male*Air Force
291	19,410	0.05	0	0.04	1.19	E1-E3*Female*Air Force
292	13,133		0	0.04	1.24	E4*Female*Air Force
293	17,957		0	0.03	1.11	E5-E6*Female*Air Force
294	4,030	0.05	44	0.05	1.07	E7-E9*Female*Air Force
295	7,937		0	0.05	1.23	O1-O3*Female*Air Force
296	3,906	0.04	56	0.05	1.09	O4-O6*Female*Air Force
297	25,867		0	0.03	1.32	E4-E5*Female*Air Force
298	9,253		0	0.04	1.58	E6-E9*Female*Air Force
299	54,530	0.05	0	0.02	1.22	Enlisted*Female*Air Force
300	11,843		0	0.04	1.38	CO*Female*Air Force
301	11,843	0.05	0	0.04	1.38	Officers*Female*Air Force
302	58,105		0	0.05	2.54	E1-E3*Male*Air Force

Table A-2. (continued)

Domain Number	Domain Size	Precision Constraint	Lagrange Ratio	Expected Precision	Design Effect	Domain Label
303	39,569		0	0.05	1.85	E4*Male*Air Force
304	93,812		0	0.03	1.59	E5-E6*Male*Air Force
305	33,984		0	0.05	1.63	E7-E9*Male*Air Force
306	31,160	0.04	37	0.05	1.30	O1-O3*Male*Air Force
307	25,413	0.05	49	0.05	1.24	O4-O6*Male*Air Force
308	96,468		0	0.03	2.05	E4-E5*Male*Air Force
309	70,897		0	0.04	2.10	E6-E9*Male*Air Force
310	225,470	0.05	0	0.02	1.90	Enlisted*Male*Air Force
311	56,573		0	0.03	1.27	CO*Male*Air Force
312	56,573	0.05	0	0.03	1.27	Officers*Male*Air Force
313	55,392		0	0.02	1.41	CONUS*Female*Air Force
314	10,853		0	0.05	2.07	OCONUS*Female*Air Force
315	55,707		0	0.02	1.40	US&Territories*Female*Air Force
316	6,522		0	0.07	2.15	Europe*Female*Air Force
317	3,941		0	0.09	2.16	API*Female*Air Force
318	74		0	0.59	1.93	OtherLoc*Female*Air Force
319	55,507		0	0.02	1.41	America*Female*Air Force
320	6,417		0	0.07	2.15	Europe*Female*Air Force
321	4,251		0	0.09	2.17	Pacific*Female*Air Force
322	25		0			South*Female*Air Force
323	232,321		0	0.02	2.03	CONUS*Male*Air Force
324	48,680		0	0.05	3.06	OCONUS*Male*Air Force
325	233,738		0	0.02	2.03	US&Territories*Male*Air Force
326	27,578		0	0.07	3.09	Europe*Male*Air Force
327	18,891		0	0.09	3.34	API*Male*Air Force
328	792		0	0.41	2.65	OtherLoc*Male*Air Force
329	232,992		0	0.02	2.03	America*Male*Air Force
330	26,942		0	0.08	3.11	Europe*Male*Air Force
331	20,248		0	0.08	3.33	Pacific*Male*Air Force
332	416		0	0.55	2.58	Central*Male*Air Force
333	315		0	0.63	2.53	South*Male*Air Force
334	41,910		0	0.02	1.18	NonMinority*Female*Air Force
335	23,086		0	0.03	1.14	Minority*Female*Air Force
336	420		0	0.26	2.22	NHAIAN*Female*Air Force
337	2,113		0	0.12	2.11	NHAPI*Female*Air Force
338	16,647		0	0.03	1.43	NHBlack*Female*Air Force
339	41,910		0	0.02	1.18	NHWhite*Female*Air Force
340	3,667		0	0.09	2.02	Hispanic*Female*Air Force
341	215,646		0	0.02	1.16	NonMinority*Male*Air Force
342	62,325		0	0.02	1.06	Minority*Male*Air Force
343	1,185		0	0.18	1.97	NHAIAN*Male*Air Force
344	6,880		0	0.07	1.94	NHAPI*Male*Air Force
345	39,821		0	0.03	1.41	NHBlack*Male*Air Force
346	215,646		0	0.02	1.16	NHWhite*Male*Air Force
347	13,672	0.05	91	0.05	1.85	Hispanic*Male*Air Force
348	1,507	0.05	0	0.04	1.14	E1-E3+E4*Female*Coast Guard
349	1,223	0.05	0	0.04	1.05	E5-E6+E7-E9*Female*Coast Guard
350	11,443	0.05	57	0.05	1.11	E1-E3+E4*Male*Coast Guard
351	13,666	0.05	6	0.05	1.03	E5-E6+E7-E9*Male*Coast Guard
352	739		0	0.06	1.12	E1-E3*Female*Coast Guard
353	768		0	0.06	1.15	E4*Female*Coast Guard

Table A-2. (continued)

Domain Number	Domain Size	Precision Constraint	Lagrange Ratio	Expected Precision	Design Effect	Domain Label
354	1,045		0	0.04	1.05	E5-E6*Female*Coast Guard
355	178		0	0.11	1.04	E7-E9*Female*Coast Guard
356	56		0	0.14	1.00	W1-W5*Female*Coast Guard
357	588		0	0.17	7.35	O1-O3*Female*Coast Guard
358	158		0	0.15	2.14	O4-O6*Female*Coast Guard
359	1,410		0	0.04	1.28	E4-E5*Female*Coast Guard
360	581		0	0.07	1.47	E6-E9*Female*Coast Guard
361	2,730	0.05	0	0.03	1.11	Enlisted*Female*Coast Guard
362	56		0	0.14	1.00	WO*Female*Coast Guard
363	746	0.10	0	0.14	6.59	CO*Female*Coast Guard
364	802	0.09	2.7E-08	0.13	6.54	Officers*Female*Coast Guard
365	5,836		0	0.07	1.08	E1-E3*Male*Coast Guard
366	5,607		0	0.07	1.12	E4*Male*Coast Guard
367	10,282		0	0.06	1.04	E5-E6*Male*Coast Guard
368	3,384		0	0.10	1.00	E7-E9*Male*Coast Guard
369	1,258		0	0.10	0.99	W1-W5*Male*Coast Guard
370	2,963		0	0.10	1.67	O1-O3*Male*Coast Guard
371	1,978		0	0.08	1.03	O4-O6*Male*Coast Guard
372	10,971		0	0.06	1.40	E4-E5*Male*Coast Guard
373	8,302		0	0.07	1.33	E6-E9*Male*Coast Guard
374	25,109		0	0.04	1.08	Enlisted*Male*Coast Guard
375	1,258		0	0.10	0.99	WO*Male*Coast Guard
376	4,941	0.10	0	0.07	1.45	CO*Male*Coast Guard
377	6,199	0.05	35	0.06	1.36	Officers*Male*Coast Guard
378	3,188		0	0.04	2.48	CONUS*Female*Coast Guard
379	49		0	0.38	3.51	OCONUS*Female*Coast Guard
380	3,237		0	0.04	2.47	US&Territories*Female*Coast Guard
381	3,188		0	0.04	2.48	America*Female*Coast Guard
382	11		0	1.29	3.88	Pacific*Female*Coast Guard
383	38		0	0.32	1.79	South*Female*Coast Guard
384	28,548		0	0.03	1.28	CONUS*Male*Coast Guard
385	743		0	0.27	2.06	OCONUS*Male*Coast Guard
386	29,269		0	0.03	1.26	US&Territories*Male*Coast Guard
387	28,548		0	0.03	1.28	America*Male*Coast Guard
388	157		0	0.58	1.44	Pacific*Male*Coast Guard
389	585		0	0.31	1.93	South*Male*Coast Guard
390	2,701		0	0.04	2.42	NonMinority*Female*Coast Guard
391	831		0	0.08	2.44	Minority*Female*Coast Guard
392	65		0	0.29	2.27	NHAIAN*Female*Coast Guard
393	153		0	0.18	2.23	NHAPI*Female*Coast Guard
394	379		0	0.13	2.86	NHBlack*Female*Coast Guard
395	2,701		0	0.04	2.42	NHWhite*Female*Coast Guard
396	234		0	0.19	3.51	Hispanic*Female*Coast Guard
397	26,198		0	0.03	1.19	NonMinority*Male*Coast Guard
398	5,112		0	0.08	1.17	Minority*Male*Coast Guard
399	660		0	0.29	2.00	NHAIAN*Male*Coast Guard
400	700		0	0.27	2.11	NHAPI*Male*Coast Guard
401	1,690		0	0.17	1.87	NHBlack*Male*Coast Guard
402	26,198		0	0.03	1.19	NHWhite*Male*Coast Guard
403	2,062		0	0.15	1.78	Hispanic*Male*Coast Guard
404	37,086		0	0.02	1.20	Low PERSTEMPO*Female*Army

Table A-2. (continued)

Domain Number	Domain Size	Precision Constraint	Lagrange Ratio	Expected Precision	Design Effect	Domain Label
405	35,167		0	0.02	1.16	High PERSTEMPO*Female*Army
406	93,270		0	0.03	1.21	Low PERSTEMPO*Male*Army
407	306,360		0	0.02	1.16	High PERSTEMPO*Male*Army
408	26,136		0	0.02	1.33	Low PERSTEMPO*Female*Navy
409	24,939		0	0.03	1.25	High PERSTEMPO*Female*Navy
410	98,837		0	0.03	1.26	Low PERSTEMPO*Male*Navy
411	215,721		0	0.02	1.17	High PERSTEMPO*Male*Navy
412	3,448		0	0.05	2.19	Low PERSTEMPO*Female*Marine Corps
413	6,873		0	0.03	1.55	High PERSTEMPO*Female*Marine Corps
414	36,461	0.05	20	0.05	1.88	Low PERSTEMPO*Male*Marine Corps
415	123,186		0	0.03	1.34	High PERSTEMPO*Male*Marine Corps
416	43,291		0	0.02	1.26	Low PERSTEMPO*Female*Air Force
417	22,889		0	0.03	1.18	High PERSTEMPO*Female*Air Force
418	107,672		0	0.03	1.93	Low PERSTEMPO*Male*Air Force
419	173,425		0	0.02	1.66	High PERSTEMPO*Male*Air Force
420	1,936		0	0.03	1.09	Low PERSTEMPO*Female*Coast Guard
421	1,480		0	0.04	1.14	High PERSTEMPO*Female*Coast Guard
422	10,073		0	0.05	1.17	Low PERSTEMPO*Male*Coast Guard
423	20,668		0	0.04	1.13	High PERSTEMPO*Male*Coast Guard
424	371,107		0	0.02	2.18	E1-E3+E4
425	252,832		0	0.02	2.23	E1-E3+E4
426	408,009		0	0.01	1.93	E5-E6+E7-E9
427	136,654		0	0.02	1.93	E5-E6+E7-E9
428	371,107		0	0.02	2.18	E1-E3
429	252,832		0	0.02	2.23	E4
430	408,009		0	0.01	1.93	E5-E6
431	136,654		0	0.02	1.93	E7-E9
432	16,262		0	0.05	1.74	W1-W5
433	121,403		0	0.02	1.97	O1-O3
434	84,664		0	0.02	1.88	O4-O6
435	490,931		0	0.02	2.50	E4-E5
436	306,564		0	0.02	2.53	E6-E9
437	1,168,602		0	0.01	2.10	Enlisted
438	16,262		0	0.05	1.74	WO
439	206,067		0	0.02	1.97	CO
440	222,329		0	0.02	1.97	Officers
441	1,167,409		0	0.01	2.48	CONUS
442	211,476		0	0.03	3.70	OCONUS
443	1,176,119		0	0.01	2.47	US&Territories
444	108,800		0	0.04	3.77	Europe
445	89,062		0	0.04	3.91	API
446	4,874		0	0.18	3.28	OtherLoc
447	1,169,305		0	0.01	2.48	America
448	107,098		0	0.04	3.77	Europe
449	94,254		0	0.04	3.92	Pacific
450	3,438		0	0.22	2.71	Central
451	4,643		0	0.18	3.67	South
452	905,693		0	0.01	2.04	NonMinority
453	475,647		0	0.01	2.34	Minority
454	14,682		0	0.11	4.43	NHAIAN
455	51,854		0	0.05	4.02	NHAPI

Table A-2. (continued)

Domain Number	Domain Size	Precision Constraint	Lagrange Ratio	Expected Precision	Design Effect	Domain Label
456	277,760		0	0.02	3.36	NHBlack
457	905,693		0	0.01	2.04	NHWhite
458	116,892		0	0.04	3.72	Hispanic
459	118,331		0	0.03	2.00	E1-E3+E4*Army
460	100,892		0	0.04	1.96	E1-E3+E4*Army
461	127,703		0	0.03	1.66	E5-E6+E7-E9*Army
462	49,982		0	0.04	1.58	E5-E6+E7-E9*Army
463	118,331		0	0.03	2.00	E1-E3*Army
464	100,892		0	0.04	1.96	E4*Army
465	127,703		0	0.03	1.66	E5-E6*Army
466	49,982		0	0.04	1.58	E7-E9*Army
467	11,200		0	0.06	1.74	W1-W5*Army
468	37,076		0	0.05	1.76	O1-O3*Army
469	26,772		0	0.04	1.59	O4-O6*Army
470	172,729		0	0.03	2.16	E4-E5*Army
471	105,848		0	0.03	2.04	E6-E9*Army
472	396,908		0	0.02	1.83	Enlisted*Army
473	11,200		0	0.06	1.74	WO*Army
474	63,848		0	0.03	1.79	CO*Army
475	75,048		0	0.03	1.88	Officers*Army
476	378,295		0	0.02	2.24	CONUS*Army
477	93,448		0	0.04	3.30	OCONUS*Army
478	379,218		0	0.02	2.23	US&Territories*Army
479	60,889		0	0.06	3.42	Europe*Army
480	30,224		0	0.08	3.54	API*Army
481	1,386		0	0.35	2.83	OtherLoc*Army
482	378,297		0	0.02	2.24	America*Army
483	60,915		0	0.06	3.42	Europe*Army
484	30,373		0	0.08	3.54	Pacific*Army
485	1,065		0	0.40	2.40	Central*Army
486	1,061		0	0.41	2.07	South*Army
487	275,335		0	0.02	1.74	NonMinority*Army
488	196,141		0	0.02	2.08	Minority*Army
489	3,870		0	0.23	3.93	NHAIAN*Army
490	14,850		0	0.11	3.60	NHAPI*Army
491	124,930		0	0.03	2.95	NHBlack*Army
492	275,335		0	0.02	1.74	NHWhite*Army
493	40,965		0	0.07	3.11	Hispanic*Army
494	95,994		0	0.04	1.95	E1-E3+E4*Navy
495	64,052		0	0.04	1.74	E1-E3+E4*Navy
496	120,223		0	0.03	1.65	E5-E6+E7-E9*Navy
497	31,461		0	0.05	1.68	E5-E6+E7-E9*Navy
498	95,994		0	0.04	1.95	E1-E3*Navy
499	64,052		0	0.04	1.74	E4*Navy
500	120,223		0	0.03	1.65	E5-E6*Navy
501	31,461		0	0.05	1.68	E7-E9*Navy
502	1,776		0	0.15	1.57	W1-W5*Navy
503	31,476		0	0.04	1.69	O1-O3*Navy
504	20,637		0	0.04	1.73	O4-O6*Navy
505	132,141		0	0.03	2.10	E4-E5*Navy
506	83,595		0	0.04	2.37	E6-E9*Navy

Table A-2. (continued)

Domain Number	Domain Size	Precision Constraint	Lagrange Ratio	Expected Precision	Design Effect	Domain Label
507	311,730		0	0.02	1.80	Enlisted*Navy
508	1,776		0	0.15	1.57	WO*Navy
509	52,113		0	0.03	1.77	CO*Navy
510	53,889		0	0.03	1.76	Officers*Navy
511	324,789		0	0.02	2.12	CONUS*Navy
512	40,073		0	0.07	3.67	OCONUS*Navy
513	330,059		0	0.02	2.10	US&Territories*Navy
514	12,684		0	0.12	4.19	Europe*Navy
515	20,046		0	0.10	3.36	API*Navy
516	2,073		0	0.29	3.59	OtherLoc*Navy
517	325,846		0	0.02	2.12	America*Navy
518	11,638		0	0.12	4.19	Europe*Navy
519	23,267		0	0.09	3.47	Pacific*Navy
520	1,541		0	0.34	2.86	Central*Navy
521	2,567		0	0.26	4.04	South*Navy
522	229,460		0	0.02	1.97	NonMinority*Navy
523	133,714		0	0.03	1.88	Minority*Navy
524	6,864		0	0.17	3.53	NHAIAN*Navy
525	22,991		0	0.09	2.90	NHAPI*Navy
526	68,595		0	0.04	2.94	NHBlack*Navy
527	229,460		0	0.02	1.97	NHWhite*Navy
528	34,256		0	0.07	2.98	Hispanic*Navy
529	72,692		0	0.04	1.56	E1-E3+E4*Marine Corps
530	28,811		0	0.05	1.75	E1-E3+E4*Marine Corps
531	36,986		0	0.04	1.83	E5-E6+E7-E9*Marine Corps
532	13,635		0	0.05	1.62	E5-E6+E7-E9*Marine Corps
533	72,692		0	0.04	1.56	E1-E3*Marine Corps
534	28,811		0	0.05	1.75	E4*Marine Corps
535	36,986		0	0.04	1.83	E5-E6*Marine Corps
536	13,635		0	0.05	1.62	E7-E9*Marine Corps
537	1,972		0	0.14	1.53	W1-W5*Marine Corps
538	10,203		0	0.05	1.67	O1-O3*Marine Corps
539	5,800		0	0.05	1.23	O4-O6*Marine Corps
540	51,344		0	0.04	2.10	E4-E5*Marine Corps
541	28,088		0	0.05	2.56	E6-E9*Marine Corps
542	152,124		0	0.02	2.02	Enlisted*Marine Corps
543	1,972		0	0.14	1.53	WO*Marine Corps
544	16,003		0	0.03	1.55	CO*Marine Corps
545	17,975		0	0.03	1.61	Officers*Marine Corps
546	144,875		0	0.02	2.60	CONUS*Marine Corps
547	17,630		0	0.09	4.21	OCONUS*Marine Corps
548	144,890		0	0.02	2.60	US&Territories*Marine Corps
549	1,127		0	0.33	3.51	Europe*Marine Corps
550	15,947		0	0.10	4.30	API*Marine Corps
551	540		0	0.50	3.14	OtherLoc*Marine Corps
552	144,926		0	0.02	2.60	America*Marine Corps
553	1,186		0	0.31	3.38	Europe*Marine Corps
554	15,947		0	0.10	4.30	Pacific*Marine Corps
555	385		0	0.61	2.71	Central*Marine Corps
556	114,442		0	0.03	2.22	NonMinority*Marine Corps
557	54,438		0	0.04	2.37	Minority*Marine Corps

Table A-2. (continued)

Domain Number	Domain Size	Precision Constraint	Lagrange Ratio	Expected Precision	Design Effect	Domain Label
558	1,618		0	0.32	4.75	NHAIAN*Marine Corps
559	4,167		0	0.19	4.65	NHAPI*Marine Corps
560	25,698		0	0.07	3.77	NHBlack*Marine Corps
561	114,442		0	0.03	2.22	NHWhite*Marine Corps
562	22,036		0	0.08	3.34	Hispanic*Marine Corps
563	77,515		0	0.04	2.83	E1-E3+E4*Air Force
564	52,702		0	0.04	2.25	E1-E3+E4*Air Force
565	111,770		0	0.02	1.91	E5-E6+E7-E9*Air Force
566	38,014		0	0.04	2.08	E5-E6+E7-E9*Air Force
567	77,515		0	0.04	2.83	E1-E3*Air Force
568	52,702		0	0.04	2.25	E4*Air Force
569	111,770		0	0.02	1.91	E5-E6*Air Force
570	38,014		0	0.04	2.08	E7-E9*Air Force
571	39,097		0	0.04	1.53	O1-O3*Air Force
572	29,319		0	0.04	1.86	O4-O6*Air Force
573	122,336		0	0.03	2.51	E4-E5*Air Force
574	80,150		0	0.03	2.55	E6-E9*Air Force
575	280,001		0	0.02	2.27	Enlisted*Air Force
576	68,416		0	0.03	1.67	CO*Air Force
577	68,416		0	0.03	1.67	Officers*Air Force
578	287,714		0	0.02	2.48	CONUS*Air Force
579	59,533		0	0.05	3.65	OCONUS*Air Force
580	289,446		0	0.02	2.47	US&Territories*Air Force
581	34,100		0	0.06	3.80	Europe*Air Force
582	22,832		0	0.07	3.83	API*Air Force
583	866		0	0.38	3.02	OtherLoc*Air Force
584	288,500		0	0.02	2.48	America*Air Force
585	33,359		0	0.06	3.82	Europe*Air Force
586	24,499		0	0.07	3.83	Pacific*Air Force
587	446		0	0.52	2.28	Central*Air Force
588	340		0	0.59	2.21	South*Air Force
589	257,557		0	0.02	1.82	NonMinority*Air Force
590	85,411		0	0.01	1.10	Minority*Air Force
591	1,605		0	0.15	2.07	NHAIAN*Air Force
592	8,993		0	0.06	2.00	NHAPI*Air Force
593	56,468		0	0.02	1.44	NHBlack*Air Force
594	257,557		0	0.02	1.82	NHWhite*Air Force
595	17,339		0	0.04	1.90	Hispanic*Air Force
596	6,575		0	0.06	1.84	E1-E3+E4*Coast Guard
597	6,375		0	0.06	1.89	E1-E3+E4*Coast Guard
598	11,327		0	0.05	1.92	E5-E6+E7-E9*Coast Guard
599	3,562		0	0.09	1.46	E5-E6+E7-E9*Coast Guard
600	6,575		0	0.06	1.84	E1-E3*Coast Guard
601	6,375		0	0.06	1.89	E4*Coast Guard
602	11,327		0	0.05	1.92	E5-E6*Coast Guard
603	3,562		0	0.09	1.46	E7-E9*Coast Guard
604	1,314		0	0.10	1.23	W1-W5*Coast Guard
605	3,551		0	0.09	2.75	O1-O3*Coast Guard
606	2,136		0	0.08	1.33	O4-O6*Coast Guard
607	12,381		0	0.05	2.52	E4-E5*Coast Guard
608	8,883		0	0.07	2.13	E6-E9*Coast Guard

Table A-2. (continued)

Domain Number	Domain Size	Precision Constraint	Lagrange Ratio	Expected Precision	Design Effect	Domain Label
609	27,839		0	0.03	1.87	Enlisted*Coast Guard
610	1,314		0	0.10	1.23	WO*Coast Guard
611	5,687		0	0.06	2.19	CO*Coast Guard
612	7,001		0	0.05	1.99	Officers*Coast Guard
613	31,736		0	0.03	2.08	CONUS*Coast Guard
614	792		0	0.26	3.01	OCONUS*Coast Guard
615	32,506		0	0.03	2.04	US&Territories*Coast Guard
616	31,736		0	0.03	2.08	America*Coast Guard
617	168		0	0.55	1.95	Pacific*Coast Guard
618	623		0	0.29	2.83	South*Coast Guard
619	28,899		0	0.03	1.89	NonMinority*Coast Guard
620	5,943		0	0.07	2.19	Minority*Coast Guard
621	725		0	0.27	3.18	NHAIAN*Coast Guard
622	853		0	0.22	4.12	NHAPI*Coast Guard
623	2,069		0	0.14	3.93	NHBlack*Coast Guard
624	28,899		0	0.03	1.89	NHWhite*Coast Guard
625	2,296		0	0.14	2.89	Hispanic*Coast Guard
626	1,390,960		0	0.01	2.16	Army+Navy+MarineCorps+AirForce+Coast Guard
Total					1.93	

Appendix B.
Detailed Tables

Table B-1.
Nonresponse Adjustment Weighting Class Definitions and Adjustment Factors

Weighting Class	Stratum	Description	Unknown Eligibility Adjustment $\left(f_c^{A1}\right)$	Eligible Nonresponse Adjustment $\left(f_c^{A2}\right)$
1	1,2,3,4	Service: Army Gender: Male Paygrade Group: E1-E3 Race/Ethnicity: All Occupational PERSTEMPO (months):All	5.7405	1.0744
2	5,6,7,8	Service: Army Gender: Male Paygrade Group: E4 Race/Ethnicity: All Occupational PERSTEMPO (months):All	4.2385	1.1008
3	9,10,11,12	Service: Army Gender: Male Paygrade Group: E5-E6 Race/Ethnicity: All Occupational PERSTEMPO (months):All	2.9610	1.0730
4	13	Service: Army Gender: Male Paygrade Group: E7-E9 Race/Ethnicity: Non-Minority Occupational PERSTEMPO (months):0.321-2.58 months	1.8000	1.0714
5	14	Service: Army Gender: Male Paygrade Group: E7-E9 Race/Ethnicity: Non-Minority Occupational PERSTEMPO (months):2.59-4.86 months	1.6423	1.0379
6	15	Service: Army Gender: Male Paygrade Group: E7-E9 Race/Ethnicity: Minority Occupational PERSTEMPO (months):0.321-2.58 months	1.8529	1.0000
7	16	Service:Army Gender:Male Paygrade Group:E7-E9 Race/Ethnicity:Minority Occupational PERSTEMPO (months):2.59-4.86 months	1.9688	1.0407
8	17	Service:Army Gender:Male Paygrade Group:W1-W5 Race/Ethnicity:Non-Minority Occupational PERSTEMPO (months):0.321-2.58 months	1.6774	1.0164
9	18	Service:Army Gender:Male Paygrade Group:W1-W5 Race/Ethnicity:Non-Minority Occupational PERSTEMPO (months):2.59-4.86 months	1.7143	1.0161

Table B-1. (continued)

Weighting Class	Stratum	Description	Unknown Eligibility Adjustment $\left(f_c^{A1}\right)$	Eligible Nonresponse Adjustment $\left(f_c^{A2}\right)$
10	19	Service:Army Gender:Male Paygrade Group:W1-W5 Race/Ethnicity:Minority Occupational PERSTEMPO (months):0.321-2.58 months	1.6250	1.0323
11	20	Service:Army Gender:Male Paygrade Group:W1-W5 Race/Ethnicity:Minority Occupational PERSTEMPO (months):2.59-4.86 months	1.8710	1.0690
12	21	Service:Army Gender:Male Paygrade Group:O1-O3 Race/Ethnicity:Non-Minority Occupational PERSTEMPO (months):0.321-2.58 months	1.9600	1.0563
13	22,24	Service:Army Gender:Male Paygrade Group:O1-O6 Race/Ethnicity:All Occupational PERSTEMPO (months):All	2.0077	1.0492
14	23	Service:Army Gender:Male Paygrade Group:O1-O3 Race/Ethnicity:Minority Occupational PERSTEMPO (months):0.321-2.58 months	1.6571	1.0938
15	25	Service:Army Gender:Male Paygrade Group:O4-O6 Race/Ethnicity:Non-Minority Occupational PERSTEMPO (months):0.321-2.58 months	1.3923	1.0284
16	26,28	Service:Army Gender:Male Paygrade Group:O4-O6 Race/Ethnicity:All Occupational PERSTEMPO (months):2.59-4.86 months	1.4093	1.0155
17	27	Service:Army Gender:Male Paygrade Group:O4-O6 Race/Ethnicity:Minority Occupational PERSTEMPO (months):0.321-2.58 months	1.5952	1.0500
18	29,30,31,32	Service:Army Gender:Female Paygrade Group:E1-E3 Race/Ethnicity:All Occupational PERSTEMPO (months):All	4.1660	1.0465

Table B-1. (continued)

Weighting Class	Stratum	Description	Unknown Eligibility Adjustment $\left(f_c^{A1}\right)$	Eligible Nonresponse Adjustment $\left(f_c^{A2}\right)$
19	33,34,35,36	Service:Army Gender:Female Paygrade Group:E4 Race/Ethnicity:All Occupational PERSTEMPO (months):All	3.5295	1.0533
20	37	Service:Army Gender:Female Paygrade Group:E5-E6 Race/Ethnicity:Non-Minority Occupational PERSTEMPO (months):0.321-2.58 months	2.0089	1.0275
21	38,40	Service:Army Gender:Female Paygrade Group:E5-E6 Race/Ethnicity:All Occupational PERSTEMPO (months):2.59-4.86 months	2.7624	1.0365
22	39	Service:Army Gender:Female Paygrade Group:E5-E6 Race/Ethnicity:Minority Occupational PERSTEMPO (months):0.321-2.58 months	2.5227	1.0688
23	41	Service:Army Gender:Female Paygrade Group:E1-E3 Race/Ethnicity:All Occupational PERSTEMPO (months):All	1.6842	1.0000
24	42,44	Service:Army Gender:Female Paygrade Group:E7-E9 Race/Ethnicity:All Occupational PERSTEMPO (months):2.59-4.86 months	1.8991	1.0067
25	43	Service:Army Gender:Female Paygrade Group:E7-E9 Race/Ethnicity:Minority Occupational PERSTEMPO (months):0.321-2.58 months	1.9806	1.0200
26	45	Service:Army Gender:Female Paygrade Group:W1-W5 Race/Ethnicity:Non-Minority Occupational PERSTEMPO (months):0.321-2.58 months	1.5513	1.0130
27	46	Service:Army Gender:Female Paygrade Group:W1-W5 Race/Ethnicity:Non-Minority Occupational PERSTEMPO (months):2.59-4.86 months	1.8056	1.0000

Table B-1. (continued)

Weighting Class	Stratum	Description	Unknown Eligibility Adjustment $\left(f_c^{A1}\right)$	Eligible Nonresponse Adjustment $\left(f_c^{A2}\right)$
28	47	Service:Army Gender:Female Paygrade Group:W1-W5 Race/Ethnicity:Minority Occupational PERSTEMPO (months):0.321-2.58 months	2.1282	1.0000
29	48	Service:Army Gender:Female Paygrade Group:W1-W5 Race/Ethnicity:Minority Occupational PERSTEMPO (months):2.59-4.86 months	1.7353	1.0000
30	49	Service:Army Gender:Female Paygrade Group:O1-O3 Race/Ethnicity:Non-Minority Occupational PERSTEMPO (months):0.321-2.58 months	1.6646	1.0321
31	50,51,52	Service:Army Gender:Female Paygrade Group:O1-O3 Race/Ethnicity:All Occupational PERSTEMPO (months):All	2.0385	1.0222
32	53	Service:Army Gender:Female Paygrade Group:O4-O6 Race/Ethnicity:Non-Minority Occupational PERSTEMPO (months):0.321-2.58 months	1.4182	1.0329
33	54,55	Service:Army Gender:Female Paygrade Group:E1-E3 Race/Ethnicity:All Occupational PERSTEMPO (months):All	1.5501	1.0777
34	56,57,58,59	Service:Navy Gender:Male Paygrade Group:E1-E3 Race/Ethnicity:All Occupational PERSTEMPO (months):All	4.9159	1.0951
35	60,61,62, 63	Service:Navy Gender:Male Paygrade Group:E4 Race/Ethnicity:All Occupational PERSTEMPO (months):All	3.9334	1.0573
36	64	Service:Navy Gender:Male Paygrade Group:E5-E6 Race/Ethnicity:Non-Minority Occupational PERSTEMPO (months):0.321-2.58 months	2.1149	1.0482

Table B-1. (continued)

Weighting Class	Stratum	Description	Unknown Eligibility Adjustment $\left(f_c^{A1}\right)$	Eligible Nonresponse Adjustment $\left(f_c^{A2}\right)$
37	65	Service:Navy Gender:Male Paygrade Group:E5-E6 Race/Ethnicity:Non-Minority Occupational PERSTEMPO (months):2.59-4.86 months	2.4204	1.0841
38	66	Service:Navy Gender:Male Paygrade Group:E5-E6 Race/Ethnicity:Minority Occupational PERSTEMPO (months):0.321-2.58 months	2.1558	1.0548
39	67	Service:Navy Gender:Male Paygrade Group:E5-E6 Race/Ethnicity:Minority Occupational PERSTEMPO (months):2.59-4.86 months	2.5500	1.0753
40	68	Service:Navy Gender:Male Paygrade Group:E7-E9 Race/Ethnicity:Non-Minority Occupational PERSTEMPO (months):0.321-2.58 months	1.5500	1.0000
41	69	Service:Navy Gender:Male Paygrade Group:E7-E9 Race/Ethnicity:Non-Minority Occupational PERSTEMPO (months):2.59-4.86 months	1.5729	1.0267
42	70	Service:Navy Gender:Male Paygrade Group:E7-E9 Race/Ethnicity:Minority Occupational PERSTEMPO (months):0.321-2.58 months	1.6207	1.0741
43	71	Service:Navy Gender:Male Paygrade Group:E7-E9 Race/Ethnicity:Minority Occupational PERSTEMPO (months):2.59-4.86 months	1.6582	1.0533
44	72,73,74,75	Service:Navy Gender:Male Paygrade Group:W1-W5 Race/Ethnicity:All Occupational PERSTEMPO (months):All	1.4742	1.0218
45	76	Service:Navy Gender:Male Paygrade Group:O1-O3 Race/Ethnicity:Non-Minority Occupational PERSTEMPO (months):0.321-2.58 months	1.7293	1.0391

Table B-1. (continued)

Weighting Class	Stratum	Description	Unknown Eligibility Adjustment $\left(f_c^{A1}\right)$	Eligible Nonresponse Adjustment $\left(f_c^{A2}\right)$
46	77,79	Service:Navy Gender:Male Paygrade Group:O1-O3 Race/Ethnicity:All Occupational PERSTEMPO (months):2.59-4.86 months	1.7307	1.0816
47	78	Service:Navy Gender:Male Paygrade Group:O1-O3 Race/Ethnicity:Minority Occupational PERSTEMPO (months):0.321-2.58 months	2.0294	1.0625
48	80,82	Service:Navy Gender:Male Paygrade Group:O4-O6 Race/Ethnicity:All Occupational PERSTEMPO (months):0.321-2.58 months	1.4084	1.0328
49	81,83	Service:Navy Gender:Male Paygrade Group:O4-O6 Race/Ethnicity:All Occupational PERSTEMPO (months):2.59-4.86 months	1.3138	1.0427
50	84,85,86,87	Service:Navy Gender:Female Paygrade Group:E1-E3 Race/Ethnicity:All Occupational PERSTEMPO (months):All	3.9073	1.0859
51	88,89,90,91	Service:Navy Gender:Female Paygrade Group:E4 Race/Ethnicity:All Occupational PERSTEMPO (months):All	3.1852	1.0476
52	92,94	Service:Navy Gender:Female Paygrade Group:E5-E6 Race/Ethnicity:All Occupational PERSTEMPO (months):0.321-2.58 months	2.4663	1.0366
53	93,95	Service:Navy Gender:Female Paygrade Group:E5-E6 Race/Ethnicity:All Occupational PERSTEMPO (months):2.59-4.86 months	2.4375	1.0334
54	96	Service:Navy Gender:Female Paygrade Group:E7-E9 Race/Ethnicity:Non-Minority Occupational PERSTEMPO (months):0.321-2.58 months	1.6768	1.0104

Table B-1. (continued)

Weighting Class	Stratum	Description	Unknown Eligibility Adjustment $\left(f_c^{A1}\right)$	Eligible Nonresponse Adjustment $\left(f_c^{A2}\right)$
55	97	Service:Navy Gender:Female Paygrade Group:E7-E9 Race/Ethnicity:Non-Minority Occupational PERSTEMPO (months):2.59-4.86 months	1.5426	1.0330
56	98	Service:Navy Gender:Female Paygrade Group:E7-E9 Race/Ethnicity:Minority Occupational PERSTEMPO (months):0.321-2.58 months	1.8235	1.0870
57	99	Service:Navy Gender:Female Paygrade Group:E7-E9 Race/Ethnicity:Minority Occupational PERSTEMPO (months):2.59-4.86 months	1.5333	1.0227
58	100	Service:Navy Gender:Female Paygrade Group:W1-W5 Race/Ethnicity:All Occupational PERSTEMPO (months):All	1.6000	1.0000
59	101	Service:Navy Gender:Female Paygrade Group:O1-O3 Race/Ethnicity:Non-Minority Occupational PERSTEMPO (months):0.321-2.58 months	1.7526	1.0216
60	102,103,104	Service:Navy Gender:Female Paygrade Group:O1-O3 Race/Ethnicity:All Occupational PERSTEMPO (months):All	2.0361	1.0267
61	105	Service:Navy Gender:Female Paygrade Group:O4-O6 Race/Ethnicity:Non-Minority Occupational PERSTEMPO (months):0.321-2.58 months	1.4635	1.0301
62	106,107	Service:Navy Gender:Female Paygrade Group:O4-O6 Race/Ethnicity:All Occupational PERSTEMPO (months):All	1.7522	1.0323
63	108,109,110,111	Service:Marine Corps Gender:Male Paygrade Group:E1-E3 Race/Ethnicity:All Occupational PERSTEMPO (months):All	5.6824	1.1202

Table B-1. (continued)

Weighting Class	Stratum	Description	Unknown Eligibility Adjustment $\left(f_c^{A1}\right)$	Eligible Nonresponse Adjustment $\left(f_c^{A2}\right)$
64	112,113,114,115	Service:Marine Corps Gender:Male Paygrade Group:E4 Race/Ethnicity:All Occupational PERSTEMPO (months):All	4.3529	1.1431
65	116,118	Service:Marine Corps Gender:Male Paygrade Group:E5-E6 Race/Ethnicity:All Occupational PERSTEMPO (months):0.321-2.58 months	2.6793	1.0902
66	117,119	Service:Marine Corps Gender:Male Paygrade Group:E5-E6 Race/Ethnicity:All Occupational PERSTEMPO (months):2.59-4.86 months	2.9619	1.0859
67	120,122,123	Service:Marine Corps Gender:Male Paygrade Group:E7-E9 Race/Ethnicity:All Occupational PERSTEMPO (months):All	2.0235	1.0732
68	121	Service:Marine Corps Gender:Male Paygrade Group:E7-E9 Race/Ethnicity:Non-Minority Occupational PERSTEMPO (months):2.59-4.86 months	2.0685	1.0504
69	124,125,126,127	Service:Marine Corps Gender:Male Paygrade Group:W1-W5 Race/Ethnicity:All Occupational PERSTEMPO (months):All	1.6723	1.0723
70	128	Service:Marine Corps Gender:Male Paygrade Group:O1-O3 Race/Ethnicity:Non-Minority Occupational PERSTEMPO (months):0.321-2.58 months	1.7092	1.0763
71	129,131	Service:Marine Corps Gender:Male Paygrade Group:O1-O3 Race/Ethnicity:All Occupational PERSTEMPO (months):2.59-4.86 months	1.7025	1.1073
72	130	Service:Marine Corps Gender:Male Paygrade Group:O1-O3 Race/Ethnicity:Minority Occupational PERSTEMPO (months):0.321-2.58 months	2.1714	1.1667

Table B-1. (continued)

Weighting Class	Stratum	Description	Unknown Eligibility Adjustment $\left(f_c^{A1}\right)$	Eligible Nonresponse Adjustment $\left(f_c^{A2}\right)$
73	132,134	Service:Marine Corps Gender:Male Paygrade Group:O4-O6 Race/Ethnicity:All Occupational PERSTEMPO (months):0.321-2.58 months	1.4521	1.0200
74	133,135	Service:Marine Corps Gender:Male Paygrade Group:O4-O6 Race/Ethnicity:All Occupational PERSTEMPO (months):2.59-4.86 months	1.5497	1.0607
75	136,137,138,139	Service:Marine Corps Gender:Female Paygrade Group:E1-E3 Race/Ethnicity:All Occupational PERSTEMPO (months):All	3.4718	1.1492
76	140,141,142,143	Service:Marine Corps Gender:Female Paygrade Group:E4 Race/Ethnicity:All Occupational PERSTEMPO (months):All	3.6336	1.0819
77	144,146	Service:Marine Corps Gender:Female Paygrade Group:E5-E6 Race/Ethnicity:All Occupational PERSTEMPO (months):0.321-2.58 months	2.8877	1.0436
78	145,147	Service:Marine Corps Gender:Female Paygrade Group:E5-E6 Race/Ethnicity:All Occupational PERSTEMPO (months):2.59-4.86 months	3.2157	1.0447
79	148,150	Service:Marine Corps Gender:Female Paygrade Group:E7-E9 Race/Ethnicity:All Occupational PERSTEMPO (months):0.321-2.58 months	2.0722	1.0181
80	149	Service:Marine Corps Gender:Female Paygrade Group:E7-E9 Race/Ethnicity:Non-Minority Occupational PERSTEMPO (months):2.59-4.86 months	1.8228	1.0260
81	151	Service:Marine Corps Gender:Female Paygrade Group:E7-E9 Race/Ethnicity:Minority Occupational PERSTEMPO (months):2.59-4.86 months	2.4177	1.0395

Table B-1. (continued)

Weighting Class	Stratum	Description	Unknown Eligibility Adjustment $\left(f_c^{A1}\right)$	Eligible Nonresponse Adjustment $\left(f_c^{A2}\right)$
82	152	Service:Marine Corps Gender:Female Paygrade Group:W1-W5 Race/Ethnicity:All Occupational PERSTEMPO (months):All	1.6809	1.0682
83	153	Service:Marine Corps Gender:Female Paygrade Group:O1-O3 Race/Ethnicity:Non-Minority Occupational PERSTEMPO (months):0.321-2.58 months	1.9067	1.0274
84	154,155	Service:Marine Corps Gender:Female Paygrade Group:O1-O3 Race/Ethnicity:All Occupational PERSTEMPO (months):All	1.7650	1.0557
85	156	Service:Marine Corps Gender:Female Paygrade Group:O4-O6 Race/Ethnicity:All Occupational PERSTEMPO (months):All	1.6176	1.0303
86	157,158,159,160	Service:Air Force Gender:Male Paygrade Group:E1-E3 Race/Ethnicity:All Occupational PERSTEMPO (months):All	3.1993	1.0552
87	161,163	Service:Air Force Gender:Male Paygrade Group:E4 Race/Ethnicity:All Occupational PERSTEMPO (months):0.321-2.58 months	2.8906	1.1718
88	162,164	Service:Air Force Gender:Male Paygrade Group:E4 Race/Ethnicity:All Occupational PERSTEMPO (months):2.59-4.86 months	3.0237	1.0623
89	165	Service:Air Force Gender:Male Paygrade Group:E5-E6 Race/Ethnicity:Non-Minority Occupational PERSTEMPO (months):0.321-2.58 months	2.3000	1.0101
90	166	Service:Air Force Gender:Male Paygrade Group:E5-E6 Race/Ethnicity:Non-Minority Occupational PERSTEMPO (months):2.59-4.86 months	2.2629	1.0365

Table B-1. (continued)

Weighting Class	Stratum	Description	Unknown Eligibility Adjustment $\left(f_c^{A1}\right)$	Eligible Nonresponse Adjustment $\left(f_c^{A2}\right)$
91	167	Service:Air Force Gender:Male Paygrade Group:E5-E6 Race/Ethnicity:Minority Occupational PERSTEMPO (months):0.321-2.58 months	2.7656	1.0435
92	168	Service:Air Force Gender:Male Paygrade Group:E5-E6 Race/Ethnicity:Minority Occupational PERSTEMPO (months):2.59-4.86 months	2.5723	1.0348
93	169	Service:Air Force Gender:Male Paygrade Group:E7-E9 Race/Ethnicity:Non-Minority Occupational PERSTEMPO (months):0.321-2.58 months	1.5556	1.0227
94	170	Service:Air Force Gender:Male Paygrade Group:E7-E9 Race/Ethnicity:Non-Minority Occupational PERSTEMPO (months):2.59-4.86 months	1.6763	1.0451
95	171	Service:Air Force Gender:Male Paygrade Group:E7-E9 Race/Ethnicity:Minority Occupational PERSTEMPO (months):0.321-2.58 months	1.9326	1.0595
96	172	Service:Air Force Gender:Male Paygrade Group:E7-E9 Race/Ethnicity:Minority Occupational PERSTEMPO (months):2.59-4.86 months	1.9848	1.0370
97	173	Service:Air Force Gender:Male Paygrade Group:O1-O3 Race/Ethnicity:Non-Minority Occupational PERSTEMPO (months):0.321-2.58 months	1.7304	1.0251
98	174,176	Service:Air Force Gender:Male Paygrade Group:O1-O3 Race/Ethnicity:All Occupational PERSTEMPO (months):2.59-4.86 months	1.8706	1.0582
99	175	Service:Air Force Gender:Male Paygrade Group:O1-O3 Race/Ethnicity:Minority Occupational PERSTEMPO (months):0.321-2.58 months	1.9104	1.0806

Table B-1. (continued)

Weighting Class	Stratum	Description	Unknown Eligibility Adjustment $\left(f_c^{A1}\right)$	Eligible Nonresponse Adjustment $\left(f_c^{A2}\right)$
100	177	Service:Air Force Gender:Male Paygrade Group:O4-O6 Race/Ethnicity:Non-Minority Occupational PERSTEMPO (months):0.321-2.58 months	1.4439	1.0513
101	178,180	Service:Air Force Gender:Male Paygrade Group:O4-O6 Race/Ethnicity:All Occupational PERSTEMPO (months):2.59-4.86 months	1.6865	1.0236
102	179	Service:Air Force Gender:Male Paygrade Group:O4-O6 Race/Ethnicity:Minority Occupational PERSTEMPO (months):0.321-2.58 months	1.6604	1.0392
103	181,182,183,184	Service:Air Force Gender:Female Paygrade Group:E1-E3 Race/Ethnicity:All Occupational PERSTEMPO (months):All	2.6603	1.0360
104	185,186,187,188	Service:Air Force Gender:Female Paygrade Group:E4 Race/Ethnicity:All Occupational PERSTEMPO (months):All	2.8876	1.0487
105	189	Service:Air Force Gender:Female Paygrade Group:E5-E6 Race/Ethnicity:Non-Minority Occupational PERSTEMPO (months):0.321-2.58 months	2.0577	1.0196
106	190	Service:Air Force Gender:Female Paygrade Group:E5-E6 Race/Ethnicity:Non-Minority Occupational PERSTEMPO (months):2.59-4.86 months	1.8883	1.0300
107	191	Service:Air Force Gender:Female Paygrade Group:E5-E6 Race/Ethnicity:Minority Occupational PERSTEMPO (months):0.321-2.58 months	2.4949	1.0476
108	192	Service:Air Force Gender:Female Paygrade Group:E5-E6 Race/Ethnicity:Minority Occupational PERSTEMPO (months):2.59-4.86 months	2.5615	1.0400

Table B-1. (continued)

Weighting Class	Stratum	Description	Unknown Eligibility Adjustment $\left(f_c^{A1}\right)$	Eligible Nonresponse Adjustment $\left(f_c^{A2}\right)$
109	193	Service:Air Force Gender:Female Paygrade Group:E7-E9 Race/Ethnicity:Non-Minority Occupational PERSTEMPO (months):0.321-2.58 months	1.4519	1.0297
110	194	Service:Air Force Gender:Female Paygrade Group:E7-E9 Race/Ethnicity:Non-Minority Occupational PERSTEMPO (months):2.59-4.86 months	1.6216	1.0735
111	195	Service:Air Force Gender:Female Paygrade Group:E7-E9 Race/Ethnicity:Minority Occupational PERSTEMPO (months):0.321-2.58 months	2.0000	1.0492
112	196	Service:Air Force Gender:Female Paygrade Group:E7-E9 Race/Ethnicity:Minority Occupational PERSTEMPO (months):2.59-4.86 months	1.9302	1.0500
113	197	Service:Air Force Gender:Female Paygrade Group:O1-O3 Race/Ethnicity:Non-Minority Occupational PERSTEMPO (months):0.321-2.58 months	1.7097	1.0093
114	198,199	Service:Air Force Gender:Female Paygrade Group:O1-O3 Race/Ethnicity:All Occupational PERSTEMPO (months):All	1.9364	1.0458
115	200,201	Service:Air Force Gender:Female Paygrade Group:O4-O6 Race/Ethnicity:All Occupational PERSTEMPO (months):All	1.3916	1.0319
116	202	Service:Air Force Gender:Female Paygrade Group:O4-O6 Race/Ethnicity:Minority Occupational PERSTEMPO (months):0.321-2.58 months	1.7826	1.0299
117	203,204,205,206	Service:Coast Guard Gender:Male Paygrade Group:E1-E3 Race/Ethnicity:All Occupational PERSTEMPO (months):All	4.1905	1.0946

Table B-1. (continued)

Weighting Class	Stratum	Description	Unknown Eligibility Adjustment $\left(f_c^{A1}\right)$	Eligible Nonresponse Adjustment $\left(f_c^{A2}\right)$
118	207,208,209,210	Service:Coast Guard Gender:Male Paygrade Group:E4 Race/Ethnicity:All Occupational PERSTEMPO (months):All	3.2052	1.0400
119	211,212,213,214	Service:Coast Guard Gender:Male Paygrade Group:E5-E6 Race/Ethnicity:All Occupational PERSTEMPO (months):All	2.1583	1.0738
120	215,216,217,218	Service:Coast Guard Gender:Male Paygrade Group:E7-E9 Race/Ethnicity:All Occupational PERSTEMPO (months):All	1.7306	1.0125
121	219,220,221	Service:Coast Guard Gender:Male Paygrade Group:W1-W5 Race/Ethnicity:All Occupational PERSTEMPO (months):All	1.5499	1.0259
122	222,224	Service:Coast Guard Gender:Male Paygrade Group:O1-O3 Race/Ethnicity:All Occupational PERSTEMPO (months):0.321-2.58 months	1.4728	1.0628
123	223,225	Service:Coast Guard Gender:Male Paygrade Group:O1-O3 Race/Ethnicity:All Occupational PERSTEMPO (months):2.59-4.86 months	1.4536	1.0803
124	226,228	Service:Coast Guard Gender:Male Paygrade Group:O4-O6 Race/Ethnicity:All Occupational PERSTEMPO (months):0.321-2.58 months	1.3030	1.0000
125	227,229	Service:Coast Guard Gender:Male Paygrade Group:O4-O6 Race/Ethnicity:All Occupational PERSTEMPO (months):2.59-4.86 months	1.3841	1.0000
126	230,231,232	Service:Coast Guard Gender:Female Paygrade Group:E1-E3 Race/Ethnicity:All Occupational PERSTEMPO (months):All	2.5889	1.0264

Table B-1. (continued)

Weighting Class	Stratum	Description	Unknown Eligibility Adjustment $\left(f_c^{A1}\right)$	Eligible Nonresponse Adjustment $\left(f_c^{A2}\right)$
127	233,235,236	Service:Coast Guard Gender:Female Paygrade Group:E4 Race/Ethnicity:All Occupational PERSTEMPO (months):All	2.6429	1.0274
128	234	Service:Coast Guard Gender:Female Paygrade Group:E4 Race/Ethnicity:Non-Minority Occupational PERSTEMPO (months):2.59-4.86 months	2.4595	1.0278
129	237,239	Service:Coast Guard Gender:Female Paygrade Group:E5-E6 Race/Ethnicity:All Occupational PERSTEMPO (months):0.321-2.58 months	2.3270	1.0393
130	238,240	Service:Coast Guard Gender:Female Paygrade Group:E5-E6 Race/Ethnicity:All Occupational PERSTEMPO (months):2.59-4.86 months	2.1128	1.0779
131	241,242	Service:Coast Guard Gender:Female Paygrade Group:E7-E9 Race/Ethnicity:All Occupational PERSTEMPO (months):All	1.7541	1.0000
132	243	Service:Coast Guard Gender:Female Paygrade Group:W1-W5 Race/Ethnicity:All Occupational PERSTEMPO (months):All	1.3333	1.0000
133	244	Service:Coast Guard Gender:Female Paygrade Group:O1-O3 Race/Ethnicity:Non-Minority Occupational PERSTEMPO (months):0.321-2.58 months	1.3929	1.0244
134	245	Service:Coast Guard Gender:Female Paygrade Group:O1-O3 Race/Ethnicity:Non-Minority Occupational PERSTEMPO (months):2.59-4.86 months	1.3846	1.0263
135	246	Service:Coast Guard Gender:Female Paygrade Group:O1-O3 Race/Ethnicity:Minority Occupational PERSTEMPO (months):All	1.6875	1.0000

Table B-1. (continued)

Weighting Class	Stratum	Description	Unknown Eligibility Adjustment $\left(f_c^{A1}\right)$	Eligible Nonresponse Adjustment $\left(f_c^{A2}\right)$
136	247,248	Service:Coast Guard Gender:Female Paygrade Group:O4-O6 Race/Ethnicity:Non-Minority Occupational PERSTEMPO (months):All	1.2994	1.0399
137	249	Service:All Gender:All,Unknown Paygrade Group:All,Unknown Race/Ethnicity:All,Unknown Occupational PERSTEMPO (months):All,Unknown	2.2239	1.0526

Table B-2.
Assignment of VARSTRAT and Overall Finite Population Factors for Use in WesVar

VARSTRAT	Strata	Achieved Sampling Rate	Minimum Sampling Rate Within VARSTRAT	Actual FPC	Overall FPC Within VARSTRAT
1	155	0.4362	0.3736	0.5638	0.6264
1	243	0.4286	0.3736	0.5714	0.6264
1	156	0.4177	0.3736	0.5823	0.6264
1	242	0.4000	0.3736	0.6000	0.6264
1	048	0.3736	0.3736	0.6264	0.6264
2	152	0.3548	0.2424	0.6452	0.7576
2	148	0.3491	0.2424	0.6509	0.7576
2	153	0.3435	0.2424	0.6565	0.7576
2	247	0.3404	0.2424	0.6596	0.7576
2	154	0.3288	0.2424	0.6712	0.7576
2	149	0.3277	0.2424	0.6723	0.7576
2	244	0.3267	0.2424	0.6733	0.7576
2	246	0.3168	0.2424	0.6832	0.7576
2	248	0.3167	0.2424	0.6833	0.7576
2	045	0.3105	0.2424	0.6895	0.7576
2	150	0.3077	0.2424	0.6923	0.7576
2	245	0.3065	0.2424	0.6936	0.7576
2	100	0.2976	0.2424	0.7024	0.7576
2	151	0.2794	0.2424	0.7206	0.7576
2	046	0.2727	0.2424	0.7273	0.7576
2	241	0.2688	0.2424	0.7312	0.7576
2	047	0.2541	0.2424	0.7459	0.7576
2	236	0.2424	0.2424	0.7576	0.7576
3	230	0.2196	0.1000	0.7804	0.9000
3	237	0.2166	0.1000	0.7834	0.9000
3	233	0.2161	0.1000	0.7839	0.9000
3	238	0.2091	0.1000	0.7909	0.9000
3	239	0.2025	0.1000	0.7975	0.9000
3	232	0.2000	0.1000	0.8000	0.9000
3	234	0.1880	0.1000	0.8120	0.9000
3	240	0.1847	0.1000	0.8153	0.9000
3	231	0.1641	0.1000	0.8359	0.9000
3	144	0.1550	0.1000	0.8450	0.9000
3	099	0.1539	0.1000	0.8462	0.9000
3	145	0.1368	0.1000	0.8632	0.9000
3	097	0.1313	0.1000	0.8687	0.9000

Table B-2. (continued)

VARSTRAT	Strata	Achieved Sampling Rate	Minimum Sampling Rate Within VARSTRAT	Actual FPC	Overall FPC Within VARSTRAT
3	146	0.1300	0.1000	0.8700	0.9000
3	147	0.1294	0.1000	0.8706	0.9000
3	105	0.1187	0.1000	0.8813	0.9000
3	096	0.1168	0.1000	0.8832	0.9000
3	098	0.1158	0.1000	0.8842	0.9000
3	235	0.1149	0.1000	0.8851	0.9000
3	054	0.1117	0.1000	0.8883	0.9000
3	143	0.1093	0.1000	0.8907	0.9000
3	107	0.1081	0.1000	0.8919	0.9000
3	106	0.1048	0.1000	0.8952	0.9000
3	200	0.1005	0.1000	0.8995	0.9000
3	141	0.1002	0.1000	0.8998	0.9000
3	201	0.1000	0.1000	0.9000	0.9000
4	140	0.0977	0.0026	0.9023	0.9974
4	055	0.0970	0.0026	0.9030	0.9974
4	053	0.0970	0.0026	0.9030	0.9974
4	229	0.0943	0.0026	0.9057	0.9974
4	202	0.0899	0.0026	0.9101	0.9974
4	142	0.0854	0.0026	0.9146	0.9974
4	193	0.0750	0.0026	0.9250	0.9974
4	196	0.0718	0.0026	0.9282	0.9974
4	104	0.0714	0.0026	0.9286	0.9974
4	052	0.0641	0.0026	0.9359	0.9974
4	194	0.0627	0.0026	0.9373	0.9974
4	226	0.0626	0.0026	0.9374	0.9974
4	225	0.0620	0.0026	0.9380	0.9974
4	195	0.0620	0.0026	0.9380	0.9974
4	103	0.0617	0.0026	0.9383	0.9974
4	219	0.0612	0.0026	0.9388	0.9974
4	137	0.0603	0.0026	0.9397	0.9974
4	221	0.0600	0.0026	0.9400	0.9974
4	101	0.0591	0.0026	0.9409	0.9974
4	044	0.0589	0.0026	0.9411	0.9974
4	198	0.0588	0.0026	0.9412	0.9974
4	180	0.0566	0.0026	0.9434	0.9974
4	139	0.0546	0.0026	0.9454	0.9974
4	132	0.0543	0.0026	0.9457	0.9974

Table B-2. (continued)

VARSTRAT	Strata	Achieved Sampling Rate	Minimum Sampling Rate Within VARSTRAT	Actual FPC	Overall FPC Within VARSTRAT
4	050	0.0543	0.0026	0.9458	0.9974
4	222	0.0541	0.0026	0.9459	0.9974
4	176	0.0539	0.0026	0.9461	0.9974
4	135	0.0538	0.0026	0.9462	0.9974
4	223	0.0530	0.0026	0.9470	0.9974
4	220	0.0516	0.0026	0.9485	0.9974
4	227	0.0510	0.0026	0.9490	0.9974
4	138	0.0508	0.0026	0.9492	0.9974
4	051	0.0500	0.0026	0.9501	0.9974
4	136	0.0497	0.0026	0.9503	0.9974
4	192	0.0493	0.0026	0.9508	0.9974
4	134	0.0482	0.0026	0.9518	0.9974
4	102	0.0479	0.0026	0.9521	0.9974
4	133	0.0464	0.0026	0.9536	0.9974
4	191	0.0464	0.0026	0.9536	0.9974
4	092	0.0459	0.0026	0.9541	0.9974
4	125	0.0459	0.0026	0.9541	0.9974
4	043	0.0458	0.0026	0.9542	0.9974
4	179	0.0456	0.0026	0.9544	0.9974
4	199	0.0454	0.0026	0.9546	0.9974
4	094	0.0445	0.0026	0.9555	0.9974
4	190	0.0439	0.0026	0.9561	0.9974
4	041	0.0433	0.0026	0.9567	0.9974
4	224	0.0433	0.0026	0.9567	0.9974
4	039	0.0424	0.0026	0.9576	0.9974
4	037	0.0421	0.0026	0.9579	0.9974
4	049	0.0412	0.0026	0.9588	0.9974
4	217	0.0400	0.0026	0.9600	0.9974
4	189	0.0391	0.0026	0.9609	0.9974
4	175	0.0389	0.0026	0.9611	0.9974
4	040	0.0387	0.0026	0.9613	0.9974
4	038	0.0386	0.0026	0.9614	0.9974
4	197	0.0381	0.0026	0.9619	0.9974
4	042	0.0365	0.0026	0.9635	0.9974
4	095	0.0362	0.0026	0.9638	0.9974
4	187	0.0359	0.0026	0.9641	0.9974
4	185	0.0358	0.0026	0.9642	0.9974

Table B-2. (continued)

VARSTRAT	Strata	Achieved Sampling Rate	Minimum Sampling Rate Within VARSTRAT	Actual FPC	Overall FPC Within VARSTRAT
4	075	0.0357	0.0026	0.9643	0.9974
4	093	0.0351	0.0026	0.9649	0.9974
4	184	0.0342	0.0026	0.9658	0.9974
4	182	0.0338	0.0026	0.9662	0.9974
4	172	0.0324	0.0026	0.9676	0.9974
4	188	0.0322	0.0026	0.9678	0.9974
4	129	0.0320	0.0026	0.9680	0.9974
4	073	0.0319	0.0026	0.9681	0.9974
4	186	0.0314	0.0026	0.9686	0.9974
4	088	0.0314	0.0026	0.9686	0.9974
4	168	0.0314	0.0026	0.9686	0.9974
4	218	0.0313	0.0026	0.9687	0.9974
4	128	0.0311	0.0026	0.9689	0.9974
4	124	0.0307	0.0026	0.9693	0.9974
4	171	0.0298	0.0026	0.9702	0.9974
4	033	0.0295	0.0026	0.9705	0.9974
4	206	0.0291	0.0026	0.9709	0.9974
4	074	0.0288	0.0026	0.9712	0.9974
4	209	0.0286	0.0026	0.9714	0.9974
4	035	0.0286	0.0026	0.9714	0.9974
4	072	0.0284	0.0026	0.9716	0.9974
4	131	0.0283	0.0026	0.9717	0.9974
4	181	0.0280	0.0026	0.9720	0.9974
4	085	0.0274	0.0026	0.9726	0.9974
4	228	0.0274	0.0026	0.9726	0.9974
4	090	0.0271	0.0026	0.9730	0.9974
4	029	0.0269	0.0026	0.9731	0.9974
4	167	0.0266	0.0026	0.9734	0.9974
4	130	0.0262	0.0026	0.9738	0.9974
4	084	0.0260	0.0026	0.9740	0.9974
4	210	0.0259	0.0026	0.9741	0.9974
4	086	0.0257	0.0026	0.9743	0.9974
4	215	0.0256	0.0026	0.9744	0.9974
4	160	0.0250	0.0026	0.9750	0.9974
4	211	0.0244	0.0026	0.9756	0.9974
4	031	0.0243	0.0026	0.9757	0.9974
4	018	0.0243	0.0026	0.9757	0.9974

Table B-2. (continued)

VARSTRAT	Strata	Achieved Sampling Rate	Minimum Sampling Rate Within VARSTRAT	Actual FPC	Overall FPC Within VARSTRAT
4	091	0.0240	0.0026	0.9760	0.9974
4	030	0.0240	0.0026	0.9760	0.9974
4	164	0.0238	0.0026	0.9762	0.9974
4	159	0.0238	0.0026	0.9762	0.9974
4	020	0.0236	0.0026	0.9764	0.9974
4	126	0.0236	0.0026	0.9764	0.9974
4	216	0.0234	0.0026	0.9766	0.9974
4	123	0.0232	0.0026	0.9768	0.9974
4	019	0.0228	0.0026	0.9772	0.9974
4	205	0.0226	0.0026	0.9774	0.9974
4	017	0.0225	0.0026	0.9775	0.9974
4	036	0.0219	0.0026	0.9781	0.9974
4	034	0.0218	0.0026	0.9782	0.9974
4	208	0.0217	0.0026	0.9783	0.9974
4	183	0.0216	0.0026	0.9784	0.9974
4	163	0.0214	0.0026	0.9786	0.9974
4	207	0.0207	0.0026	0.9793	0.9974
4	087	0.0205	0.0026	0.9795	0.9974
4	121	0.0205	0.0026	0.9795	0.9974
4	122	0.0204	0.0026	0.9796	0.9974
4	203	0.0201	0.0026	0.9799	0.9974
4	083	0.0196	0.0026	0.9804	0.9974
4	120	0.0195	0.0026	0.9805	0.9974
4	212	0.0190	0.0026	0.9810	0.9974
4	089	0.0189	0.0026	0.9811	0.9974
4	032	0.0186	0.0026	0.9814	0.9974
4	082	0.0185	0.0026	0.9815	0.9974
4	080	0.0171	0.0026	0.9829	0.9974
4	204	0.0170	0.0026	0.9830	0.9974
4	081	0.0168	0.0026	0.9832	0.9974
4	028	0.0164	0.0026	0.9836	0.9974
4	249	0.0164	0.0026	0.9836	0.9974
4	213	0.0160	0.0026	0.9840	0.9974
4	214	0.0149	0.0026	0.9851	0.9974
4	026	0.0149	0.0026	0.9851	0.9974
4	025	0.0148	0.0026	0.9852	0.9974
4	071	0.0144	0.0026	0.9856	0.9974

Table B-2. (continued)

VARSTRAT	Strata	Achieved Sampling Rate	Minimum Sampling Rate Within VARSTRAT	Actual FPC	Overall FPC Within VARSTRAT
4	027	0.0141	0.0026	0.9859	0.9974
4	116	0.0125	0.0026	0.9875	0.9974
4	070	0.0123	0.0026	0.9877	0.9974
4	068	0.0120	0.0026	0.9880	0.9974
4	069	0.0112	0.0026	0.9888	0.9974
4	177	0.0111	0.0026	0.9889	0.9974
4	077	0.0106	0.0026	0.9894	0.9974
4	174	0.0099	0.0026	0.9901	0.9974
4	117	0.0097	0.0026	0.9903	0.9974
4	079	0.0097	0.0026	0.9903	0.9974
4	078	0.0096	0.0026	0.9904	0.9974
4	173	0.0096	0.0026	0.9904	0.9974
4	076	0.0094	0.0026	0.9906	0.9974
4	178	0.0094	0.0026	0.9906	0.9974
4	114	0.0091	0.0026	0.9909	0.9974
4	112	0.0089	0.0026	0.9911	0.9974
4	119	0.0084	0.0026	0.9916	0.9974
4	113	0.0083	0.0026	0.9917	0.9974
4	023	0.0082	0.0026	0.9918	0.9974
4	066	0.0079	0.0026	0.9921	0.9974
4	014	0.0075	0.0026	0.9925	0.9974
4	016	0.0074	0.0026	0.9926	0.9974
4	115	0.0072	0.0026	0.9928	0.9974
4	118	0.0072	0.0026	0.9928	0.9974
4	170	0.0071	0.0026	0.9929	0.9974
4	169	0.0070	0.0026	0.9930	0.9974
4	024	0.0068	0.0026	0.9932	0.9974
4	166	0.0065	0.0026	0.9935	0.9974
4	015	0.0065	0.0026	0.9935	0.9974
4	067	0.0062	0.0026	0.9938	0.9974
4	064	0.0062	0.0026	0.9938	0.9974
4	022	0.0060	0.0026	0.9940	0.9974
4	162	0.0059	0.0026	0.9941	0.9974
4	165	0.0059	0.0026	0.9941	0.9974
4	009	0.0058	0.0026	0.9942	0.9974
4	021	0.0057	0.0026	0.9944	0.9974
4	161	0.0056	0.0026	0.9944	0.9974

Table B-2. (continued)

VARSTRAT	Strata	Achieved Sampling Rate	Minimum Sampling Rate Within VARSTRAT	Actual FPC	Overall FPC Within VARSTRAT
4	013	0.0056	0.0026	0.9944	0.9974
4	111	0.0055	0.0026	0.9945	0.9974
4	011	0.0054	0.0026	0.9946	0.9974
4	158	0.0053	0.0026	0.9947	0.9974
4	010	0.0050	0.0026	0.9950	0.9974
4	059	0.0049	0.0026	0.9951	0.9974
4	060	0.0049	0.0026	0.9951	0.9974
4	012	0.0049	0.0026	0.9951	0.9974
4	005	0.0048	0.0026	0.9952	0.9974
4	001	0.0046	0.0026	0.9954	0.9974
4	109	0.0045	0.0026	0.9955	0.9974
4	062	0.0045	0.0026	0.9955	0.9974
4	108	0.0041	0.0026	0.9959	0.9974
4	065	0.0041	0.0026	0.9959	0.9974
4	058	0.0040	0.0026	0.9960	0.9974
4	063	0.0039	0.0026	0.9961	0.9974
4	061	0.0039	0.0026	0.9961	0.9974
4	006	0.0038	0.0026	0.9962	0.9974
4	057	0.0036	0.0026	0.9964	0.9974
4	110	0.0035	0.0026	0.9965	0.9974
4	007	0.0034	0.0026	0.9966	0.9974
4	003	0.0029	0.0026	0.9971	0.9974
4	008	0.0029	0.0026	0.9971	0.9974
4	002	0.0027	0.0026	0.9973	0.9974
4	157	0.0027	0.0026	0.9973	0.9974
4	004	0.0027	0.0026	0.9973	0.9974
4	056	0.0026	0.0026	0.9974	0.9974
4	127	0.0000	0.0000	1.0000	0.9974

Table B-3.
Collapsed Design Strata Used for Variance Estimation in SUDAAN

Variance Strata (TVSTR)	Total Population in Variance Strata	Achieved Sample Size	Design Strata
1	97,169	278	1, 2, 3, 4
2	83,799	298	5, 6, 7, 8
3	109,768	557	9, 10, 11, 12
4	5,037	28	13
5	17,529	132	14
6	5,194	34	15
7	16,583	123	16
8	2,707	61	17
9	5,100	124	18
10	1,362	31	19
11	1,228	29	20
12	12,566	71	21
13	13,935	86	22, 24
14	3,914	32	23
15	11,860	176	25
16	8,620	130	26, 28
17	2,838	40	27
18	20,942	474	29, 30, 31, 32
19	17,024	429	33, 34, 35, 36
20	2,587	109	37
21	9,481	367	38, 40
22	5,823	247	39
23	877	38	41
24	2,546	137	42, 44
25	2,206	101	43
26	248	77	45
27	132	36	46
28	307	78	47
29	91	34	48
30	3,785	156	49
31	2,762	142	50, 51, 52
32	2,196	213	53
33	1,167	116	54, 55
34	77,612	295	56, 57, 58, 59
35	52,805	213	60, 61, 62, 63

Table B-3. (continued)

Variance Strata (TVSTR)	Total Population in Variance Strata	Achieved Sample Size	Design Strata
36	13,398	83	64
37	55,306	226	65
38	9,186	73	66
39	29,793	186	67
40	5,014	60	68
41	16,712	187	69
42	2,196	27	70
43	5,192	75	71
44	1,643	49	72, 73, 74, 75
45	13,571	128	76
46	9,172	96	77, 79
47	3,334	32	78
48	10,535	182	80, 82
49	6,991	119	81, 83
50	17,609	434	84, 85, 86, 87
51	10,834	265	88, 89,90, 91
52	5,396	244	92, 94
53	6,730	240	93, 95
54	839	98	96
55	693	91	97
56	406	47	98
57	286	44	99
58	84	25	100
59	3,149	186	101
60	1,829	107	102, 103, 104
61	2,241	266	105
62	586	63	106, 107
63	67,680	310	108, 109, 110, 111
64	26,543	215	112, 113, 114, 115
65	4,108	44	116, 118
66	30,350	280	117, 119
67	6,095	136	120, 122, 123
68	6,779	139	121
69	1,836	55	124, 125, 126, 127
70	4,210	131	128
71	4,126	130	129, 131

Table B-3. (continued)

Variance Strata (TVSTR)	Total Population in Variance Strata	Achieved Sample Size	Design Strata
72	1,144	30	130
73	2,780	149	132, 134
74	2,850	134	133, 135
75	4,505	248	136, 137, 138, 139
76	1,979	202	140, 141, 142, 143
77	458	66	144, 146
78	1,708	227	145, 147
79	158	53	148, 150
80	235	77	149
81	272	76	151
82	124	44	152
83	425	146	153
84	222	89	154, 155
85	158	66	156
86	56,915	553	157, 158, 159, 160
87	7,151	80	161, 163
88	31,550	333	162, 164
89	16,678	99	165
90	54,381	356	166
91	6,929	184	167
92	14,695	461	168
93	6,301	44	169
94	18,682	133	170
95	2,817	84	171
96	5,857	190	172
97	20,796	199	173
98	5,867	76	174, 176
99	3,191	124	175
100	17,646	195	177
101	5,338	60	178, 180
102	2,238	102	179
103	18,972	548	181, 182, 183, 184
104	12,775	434	185, 186, 187, 188
105	6,529	255	189
106	4,557	200	190
107	4,077	189	191

Table B-3. (continued)

Variance Strata (TVSTR)	Total Population in Variance Strata	Achieved Sample Size	Design Strata
108	2,538	125	192
109	1,346	101	193
110	1,100	69	194
111	984	61	195
112	571	41	196
113	5,640	215	197
114	1,848	88	198, 199
115	3,126	314	200, 201
116	745	67	202
117	5,830	117	203, 204, 205, 206
118	5,607	126	207, 208, 209, 210
119	10,282	193	211, 212, 213, 214
120	3,384	84	215, 216, 217, 218
121	1,258	74	219, 220, 221
122	1,473	77	222, 224
123	941	51	223, 225
124	1,127	68	226, 228
125	837	45	227, 229
126	739	153	230, 231, 232
127	385	77	233, 235, 236
128	383	72	234
129	472	100	237, 239
130	573	116	238, 240
131	178	59	241, 242
132	56	24	243
133	251	82	244
134	124	38	245
135	101	32	246
136	154	51	247, 248
137	11,670	191	249

Table B-4.
Location, Completion, and Response Rates by Design Stratum for the WGR2002

									Unweighted			Base - Weighted		
Stratum	Service	Gender	PaygradeGroup	Race/ Ethnicity	PERSTEMPO	Eligible Sample	Locatable Sample	Complete Respondents	Location Rate	Completion Rate	Response Rate	Location Rate	Completion Rate	Response Rate
001	Army	Male	E1-E3	Non-Minority	0.321-2.58 months	107	98	32	91.6%	32.7%	29.9%	91.6%	32.7%	29.9%
002	Army	Male	E1-E3	Non-Minority	2.59-4.86 months	919	824	146	89.7	17.7	15.9	89.7	17.7	15.9
003	Army	Male	E1-E3	Minority	0.321-2.58 months	110	106	17	96.4	16.0	15.5	96.4	16.0	15.5
004	Army	Male	E1-E3	Minority	2.59-4.86 months	596	549	83	92.1	15.1	13.9	92.1	15.1	13.9
005	Army	Male	E4	Non-Minority	0.321-2.58 months	135	133	39	98.5	29.3	28.9	98.5	29.3	28.9
006	Army	Male	E4	Non-Minority	2.59-4.86 months	653	623	160	95.4	25.7	24.5	95.4	25.7	24.5
007	Army	Male	E4	Minority	0.321-2.58 months	124	118	23	95.2	19.5	18.5	95.2	19.5	18.5
008	Army	Male	E4	Minority	2.59-4.86 months	509	484	76	95.1	15.7	14.9	95.1	15.7	14.9
009	Army	Male	E5-E6	Non-Minority	0.321-2.58 months	156	152	60	97.4	39.5	38.5	97.4	39.5	38.5
010	Army	Male	E5-E6	Non-Minority	2.59-4.86 months	755	741	254	98.1	34.3	33.6	98.1	34.3	33.6
011	Army	Male	E5-E6	Minority	0.321-2.58 months	167	161	52	96.4	32.3	31.1	96.4	32.3	31.1
012	Army	Male	E5-E6	Minority	2.59-4.86 months	709	690	191	97.3	27.7	26.9	97.3	27.7	26.9
013	Army	Male	E7-E9	Non-Minority	0.321-2.58 months	54	53	28	98.1	52.8	51.9	98.1	52.8	51.9
014	Army	Male	E7-E9	Non-Minority	2.59-4.86 months	225	223	132	99.1	59.2	58.7	99.1	59.2	58.7
015	Army	Male	E7-E9	Minority	0.321-2.58 months	63	62	34	98.4	54.8	54.0	98.4	54.8	54.0
016	Army	Male	E7-E9	Minority	2.59-4.86 months	252	246	123	97.6	50.0	48.8	97.6	50.0	48.8
017	Army	Male	W1-W5	Non-Minority	0.321-2.58 months	104	102	61	98.1	59.8	58.7	98.1	59.8	58.7
018	Army	Male	W1-W5	Non-Minority	2.59-4.86 months	216	216	124	100.0	57.4	57.4	100.0	57.4	57.4

Table B-4. (continued)

									Unweighted			Weighted		
Stratum	Service	Gender	Paygrade Group	Race/ Ethnicity	PERSTEMPO	Eligible Sample	Locatable Sample	Complete Respondents	Location Rate	Completion Rate	Response Rate	Location Rate	Completion Rate	Response Rate
019	Army	Male	W1-W5	Minority	0.321-2.58 months	52	52	31	100.0%	59.6%	59.6%	100.0%	59.6%	59.6%
020	Army	Male	W1-W5	Minority	2.59-4.86 months	58	58	29	100.0	50.0	50.0	100.0	50.0	50.0
021	Army	Male	O1-O3	Non-Minority	0.321-2.58 months	147	146	71	99.3	48.6	48.3	99.3	48.6	48.3
022	Army	Male	O1-O3	Non-Minority	2.59-4.86 months	138	134	68	97.1	50.7	49.3	97.1	50.7	49.3
023	Army	Male	O1-O3	Minority	0.321-2.58 months	58	56	32	96.6	57.1	55.2	96.6	57.1	55.2
024	Army	Male	O1-O3	Minority	2.59-4.86 months	45	44	18	97.8	40.9	40.0	97.8	40.9	40.0
025	Army	Male	O4-O6	Non-Minority	0.321-2.58 months	252	252	176	100.0	69.8	69.8	100.0	69.8	69.8
026	Army	Male	O4-O6	Non-Minority	2.59-4.86 months	161	160	112	99.4	70.0	69.6	99.4	70.0	69.6
027	Army	Male	O4-O6	Minority	0.321-2.58 months	67	66	40	98.5	60.6	59.7	98.5	60.6	59.7
028	Army	Male	O4-O6	Minority	2.59-4.86 months	25	25	18	100.0	72.0	72.0	100.0	72.0	72.0
029	Army	Female	E1-E3	Non-Minority	0.321-2.58 months	272	252	88	92.6	34.9	32.4	92.6	34.9	32.4
030	Army	Female	E1-E3	Non-Minority	2.59-4.86 months	528	483	141	91.5	29.2	26.7	91.5	29.2	26.7
031	Army	Female	E1-E3	Minority	0.321-2.58 months	495	465	110	93.9	23.7	22.2	93.9	23.7	22.2
032	Army	Female	E1-E3	Minority	2.59-4.86 months	811	748	135	92.2	18.0	16.6	92.2	18.0	16.6
033	Army	Female	E4	Non-Minority	0.321-2.58 months	266	263	95	98.9	36.1	35.7	98.9	36.1	35.7
034	Army	Female	E4	Non-Minority	2.59-4.86 months	279	267	80	95.7	30.0	28.7	95.7	30.0	28.7
035	Army	Female	E4	Minority	0.321-2.58 months	528	507	138	96.0	27.2	26.1	96.0	27.2	26.1
036	Army	Female	E4	Minority	2.59-4.86 months	549	529	116	96.4	21.9	21.1	96.4	21.9	21.1

Table B-4. (continued)

									Unweighted			Weighted		
Stratum	Service	Gender	Paygrade Group	Race/ Ethnicity	PERSTEMPO	Eligible Sample	Locatable Sample	Complete Respondents	Location Rate	Completion Rate	Response Rate	Location Rate	Completion Rate	Response Rate
037	Army	Female	E5-E6	Non-Minority	0.321-2.58 months	225	223	109	99.1%	48.9%	48.4%	99.1%	48.9%	48.4%
038	Army	Female	E5-E6	Non-Minority	2.59-4.86 months	225	219	105	97.4	48.0	46.7	97.4	48.0	46.7
039	Army	Female	E5-E6	Minority	0.321-2.58 months	666	655	247	98.3	37.7	37.1	98.3	37.75	37.1
040	Army	Female	E5-E6	Minority	2.59-4.86 months	851	836	261	98.2	31.2	30.7	98.2	31.2	30.7
041	Army	Female	E7-E9	Non-Minority	0.321-2.58 months	64	64	38	100.0	59.4	59.4	100.0	59.4	59.4
042	Army	Female	E7-E9	Non-Minority	2.59-4.86 months	40	40	21	100.0	52.5	52.5	100.0	52.5	52.5
043	Army	Female	E7-E9	Minority	0.321-2.58 months	202	200	100	99.0	50.0	49.5	99.0	50.0	49.5
044	Army	Female	E7-E9	Minority	2.59-4.86 months	222	220	116	99.1	52.7	52.3	99.1	52.7	52.3
045	Army	Female	W1-W5	Non-Minority	0.321-2.58 months	121	120	77	99.2	64.2	63.6	99.2	64.2	63.6
046	Army	Female	W1-W5	Non-Minority	2.59-4.86 months	65	64	36	98.5	56.3	55.4	98.5	56.2	55.4
047	Army	Female	W1-W5	Minority	0.321-2.58 months	166	162	78	97.6	48.1	47.0	97.6	48.1	47.0
048	Army	Female	W1-W5	Minority	2.59-4.86 months	59	59	34	100.0	57.6	57.6	100.0	57.6	57.6
049	Army	Female	O1-O3	Non-Minority	0.321-2.58 months	268	267	156	99.6	58.4	58.2	99.6	58.4	58.2
050	Army	Female	O1-O3	Non-Minority	2.59-4.86 months	40	40	23	100.0	57.5	57.5	100.0	57.5	57.5
051	Army	Female	O1-O3	Minority	0.321-2.58 months	237	235	109	99.2	46.4	46.0	99.2	46.4	46.0
052	Army	Female	O1-O3	Minority	2.59-4.86 months	21	19	10	90.5	52.6	47.6	90.5	52.6	47.6
053	Army	Female	O4-O6	Non-Minority	0.321-2.58 months	312	311	213	99.7	68.5	68.3	99.7	68.5	68.3

Table B-4. (continued)

									Unweighted			Weighted		
Stratum	Service	Gender	Paygrade Group	Race/ Ethnicity	PERSTEMPO	Eligible Sample	Locatable Sample	Complete Respondents	Location Rate	Completion Rate	Response Rate	Location Rate	Completion Rate	Response Rate
054	Army	Female	O4-O6	Non-Minority, Minority	2.59-4.86 months	31	31	21	100.0%	67.7%	67.7%	100.0%	67.7%	67.7%
055	Army	Female	O4-O6	Minority	0.321-2.58 months	163	161	95	98.8	59.0	58.3	98.8	59.0	58.3
056	Navy	Male	E1-E3	Non-Minority	0.321-2.58 months	254	237	40	93.5	16.8	15.7	93.5	16.8	15.7
057	Navy	Male	E1-E3	Non-Minority	2.59-4.86 months	527	489	96	92.8	19.6	18.2	92.8	19.6	18.2
058	Navy	Male	E1-E3	Minority	0.321-2.58 months	290	273	59	94.1	21.6	20.3	94.1	21.6	20.3
059	Navy	Male	E1-E3	Minority	2.59-4.86 months	497	478	99	96.2	20.7	19.9	96.2	20.7	19.9
060	Navy	Male	E4	Non-Minority	0.321-2.58 months	75	73	23	97.3	31.5	30.7	97.3	31.5	30.7
061	Navy	Male	E4	Non-Minority	2.59-4.86 months	407	400	103	98.3	25.8	25.3	98.3	25.7	25.3
062	Navy	Male	E4	Minority	0.321-2.58 months	73	70	19	95.9	27.1	26.0	95.9	27.1	26.0
063	Navy	Male	E4	Minority	2.59-4.86 months	343	333	68	97.1	20.4	19.8	97.1	20.4	19.8
064	Navy	Male	E5-E6	Non-Minority	0.321-2.58 months	184	181	83	98.4	45.9	45.1	98.4	45.9	45.1
065	Navy	Male	E5-E6	Non-Minority	2.59-4.86 months	593	585	226	98.7	38.6	38.1	98.7	38.6	38.1
066	Navy	Male	E5-E6	Minority	0.321-2.58 months	166	164	73	98.8	44.5	44.0	98.8	44.5	44.0
067	Navy	Male	E5-E6	Minority	2.59-4.86 months	510	503	186	98.6	37.0	36.5	98.6	37.0	36.5
068	Navy	Male	E7-E9	Non-Minority	0.321-2.58 months	93	93	60	100.0	64.5	64.5	100.0	64.5	64.5
069	Navy	Male	E7-E9	Non-Minority	2.59-4.86 months	302	301	187	99.7	62.1	61.9	99.7	62.1	61.9
070	Navy	Male	E7-E9	Minority	0.321-2.58 months	47	47	27	100.0	57.4	57.4	100.0	57.4	57.4

Table B-4. (continued)

									Unweighted			Weighted		
Stratum	Service	Gender	Paygrade Group	Race/ Ethnicity	PERSTEMPO	Eligible Sample	Locatable Sample	Complete Respondents	Location Rate	Completion Rate	Response Rate	Location Rate	Completion Rate	Response Rate
071	Navy	Male	E7-E9	Minority	2.59-4.86 months	131	129	75	98.5%	58.1%	57.3%	98.5%	58.1%	57.3%
072	Navy	Male	W1-W5	Non-Minority	0.321-2.58 months	35	35	24	100.0	68.6	68.6	100.0	68.6	68.6
073	Navy	Male	W1-W5	Non-Minority	2.59-4.86 months	19	19	13	100.0	68.4	68.4	100.0	68.4	68.4
074	Navy	Male	W1-W5	Minority	0.321-2.58 months	14	13	8	92.9	61.5	57.1	92.9	61.5	57.1
075	Navy	Male	W1-W5	Minority	2.59-4.86 months	6	6	4	100.0	66.7	66.7	100.0	66.7	66.7
076	Navy	Male	O1-O3	Non-Minority	0.321-2.58 months	230	217	128	94.3	59.0	55.7	94.3	59.0	55.7
077	Navy	Male	O1-O3	Non-Minority	2.59-4.86 months	143	140	81	97.9	57.9	56.6	97.9	57.9	56.6
078	Navy	Male	O1-O3	Minority	0.321-2.58 months	69	65	32	94.2	49.2	46.4	94.2	49.2	46.4
079	Navy	Male	O1-O3	Minority	2.59-4.86 months	39	39	15	100.0	38.5	38.5	100.0	38.5	38.5
080	Navy	Male	O4-O6	Non-Minority	0.321-2.58 months	229	229	159	100.0	69.4	69.4	100.0	69.4	69.4
081	Navy	Male	O4-O6	Non-Minority	2.59-4.86 months	148	147	108	99.3	73.5	73.0	99.3	73.5	73.0
082	Navy	Male	O4-O6	Minority	0.321-2.58 months	36	36	23	100.0	63.9	63.9	100.0	63.9	63.9
083	Navy	Male	O4-O6	Minority	2.59-4.86 months	15	14	11	93.3	78.6	73.3	93.3	78.6	73.3
084	Navy	Female	E1-E3	Non-Minority	0.321-2.58 months	325	314	92	96.6	29.3	28.3	96.6	29.3	28.3
085	Navy	Female	E1-E3	Non-Minority	2.59-4.86 months	439	414	123	94.3	29.7	28.0	94.3	29.7	28.0
086	Navy	Female	E1-E3	Minority	0.321-2.58 months	484	467	111	96.5	23.8	22.9	96.5	23.8	22.9
087	Navy	Female	E1-E3	Minority	2.59-4.86 months	614	591	108	96.3	18.3	17.6	96.3	18.3	17.6
088	Navy	Female	E4	Non-Minority	0.321-2.58 months	163	160	61	98.2	38.1	37.4	98.2	38.1	37.4

Table B-4. (continued)

									Unweighted			Weighted		
Stratum	Service	Gender	Paygrade Group	Race/ Ethnicity	PERSTEMPO	Eligible Sample	Locatable Sample	Complete Respondents	Location Rate	Completion Rate	Response Rate	Location Rate	Completion Rate	Response Rate
089	Navy	Female	E4	Non-Minority	2.59-4.86 months	218	207	62	95.0%	30.0%	28.4%	95.0%	30.0%	28.4%
090	Navy	Female	E4	Minority	0.321-2.58 months	224	222	63	99.1	28.4	28.1	99.1	28.4	28.1
091	Navy	Female	E4	Minority	2.59-4.86 months	277	272	79	98.2	29.0	28.5	98.2	29.0	28.5
092	Navy	Female	E5-E6	Non-Minority	0.321-2.58 months	288	288	123	100.0	42.7	42.7	100.0	42.7	42.7
093	Navy	Female	E5-E6	Non-Minority	2.59-4.86 months	271	270	118	99.6	43.7	43.5	99.6	43.7	43.5
094	Navy	Female	E5-E6	Minority	0.321-2.58 months	340	338	121	99.4	35.8	35.6	99.4	35.8	35.6
095	Navy	Female	E5-E6	Minority	2.59-4.86 months	339	337	122	99.4	36.2	36.0	99.4	36.2	36.0
096	Navy	Female	E7-E9	Non-Minority	0.321-2.58 months	163	163	96	100.0	59.0	59.0	100.0	59.0	59.0
097	Navy	Female	E7-E9	Non-Minority	2.59-4.86 months	145	143	91	98.6	63.6	62.8	98.6	63.6	62.8
098	Navy	Female	E7-E9	Minority	0.321-2.58 months	91	91	46	100.0	50.5	50.5	100.0	50.5	50.5
099	Navy	Female	E7-E9	Minority	2.59-4.86 months	69	68	44	98.6	64.7	63.8	98.6	64.7	63.8
100	Navy	Female	W1-W5	Non-Minority, Minority	0.321-2.58 months, 2.59-4.86 months	40	40	25	100.0	62.5	62.5	100.0	62.5	62.5
101	Navy	Female	O1-O3	Non-Minority	0.321-2.58 months	331	326	185	98.5	56.7	55.8	98.5	56.7	55.8
102	Navy	Female	O1-O3	Non-Minority	2.59-4.86 months	51	50	25	98.0	50.0	49.0	98.0	50.0	49.0
103	Navy	Female	O1-O3	Minority	0.321-2.58 months	151	149	72	98.7	48.3	47.7	98.7	48.3	47.7
104	Navy	Female	O1-O3	Minority	2.59-4.86 months	22	21	10	95.5	47.6	45.5	95.5	47.6	45.5
105	Navy	Female	O4-O6	Non-Minority	0.321-2.58 months	401	400	266	99.8	66.5	66.3	99.8	66.5	66.3

Table B-4. (continued)

									Unweighted			Weighted		
Stratum	Service	Gender	Paygrade Group	Race/ Ethnicity	PERSTEMPO	Eligible Sample	Locatable Sample	Complete Respondents	Location Rate	Completion Rate	Response Rate	Location Rate	Completion Rate	Response Rate
106	Navy	Female	O4-O6	Non-Minority, Minority	2.59-4.86 months	19	19	11	100.0%	57.9%	57.9%	100.0%	57.9%	57.9%
107	Navy	Female	O4-O6	Minority	0.321-2.58 months	95	95	52	100.0	54.7	54.7	100.0	54.7%	54.7%
108	Marine Corps	Male	E1-E3	Non-Minority	0.321-2.58 months	308	264	51	85.7	19.3	16.6	85.7	19.3	16.6
109	Marine Corps	Male	E1-E3	Non-Minority	2.59-4.86 months	973	927	150	95.2	16.2	15.4	95.2	16.2	15.4
110	Marine Corps	Male	E1-E3	Minority	0.321-2.58 months	155	137	19	88.4	13.9	12.3	88.4	13.9	12.3
111	Marine Corps	Male	E1-E3	Minority	2.59-4.86 months	528	502	89	95.1	17.7	16.9	95.1	17.7	16.9
112	Marine Corps	Male	E4	Non-Minority	0.321-2.58 months	87	83	18	95.4	21.7	20.7	95.4	21.7	20.7
113	Marine Corps	Male	E4	Non-Minority	2.59-4.86 months	612	590	133	96.4	22.5	21.7	96.4	22.5	21.7
114	Marine Corps	Male	E4	Minority	0.321-2.58 months	52	51	9	98.1	17.6	17.3	98.1	17.6	17.3
115	Marine Corps	Male	E4	Minority	2.59-4.86 months	325	308	54	94.8	17.5	16.6	94.8	17.5	16.6
116	Marine Corps	Male	E5-E6	Non-Minority	0.321-2.58 months	83	80	34	96.4	42.5	41.0	96.4	42.5	41.0
117	Marine Corps	Male	E5-E6	Non-Minority	2.59-4.86 months	542	535	188	98.7	35.1	34.7	98.7	35.1	34.7
118	Marine Corps	Male	E5-E6	Minority	0.321-2.58 months	46	44	10	95.7	22.7	21.7	95.7	22.7	21.7
119	Marine Corps	Male	E5-E6	Minority	2.59-4.86 months	366	362	91	98.9	25.1	24.8	98.9	25.1	24.8
120	Marine Corps	Male	E7-E9	Non-Minority	0.321-2.58 months	52	51	22	98.1	43.1	42.3	98.1	43.1	42.3
121	Marine Corps	Male	E7-E9	Non-Minority	2.59-4.86 months	302	302	139	100.0	46.0	46.0	100.0	46.0	46.0
122	Marine Corps	Male	E7-E9	Minority	0.321-2.58 months	21	21	9	100.0	42.9	42.9	100.0	42.9	42.9

Table B-4. (continued)

									Unweighted			Weighted		
Stratum	Service	Gender	Paygrade Group	Race/ Ethnicity	PERSTEMPO	Eligible Sample	Locatable Sample	Complete Respondents	Location Rate	Completion Rate	Response Rate	Location Rate	Completion Rate	Response Rate
123	Marine Corps	Male	E7-E9	Minority	2.59-4.86 months	222	222	105	100.0%	47.3%	47.3%	100.0%	47.3%	47.3%
124	Marine Corps	Male	W1-W5	Non-Minority	0.321-2.58 months	58	57	35	98.3	60.9	59.9	98.3	60.9	59.9
125	Marine Corps	Male	W1-W5	Non-Minority	2.59-4.86 months	14	14	10	100.0	71.4	71.4	100.0	71.4	71.4
126	Marine Corps	Male	W1-W5	Minority	0.321-2.58 months	21	21	9	100.0	42.9	42.9	100.0	42.9	42.9
127	Marine Corps	Male	W1-W5	Minority	2.59-4.86 months	5	4	0	80.0	0.0	0.0	80.0	0.0	0.0
128	Marine Corps	Male	O1-O3	Non-Minority	0.321-2.58 months	241	233	131	96.7	56.2	54.4	96.7	56.2	54.4
129	Marine Corps	Male	O1-O3	Non-Minority	2.59-4.86 months	211	209	115	99.1	55.0	54.5	99.1	55.0	54.5
130	Marine Corps	Male	O1-O3	Minority	0.321-2.58 months	76	72	30	94.7	41.7	39.5	94.7	41.7	39.5
131	Marine Corps	Male	O1-O3	Minority	2.59-4.86 months	35	35	15	100.0	42.9	42.9	100.0	42.9	42.9
132	Marine Corps	Male	O4-O6	Non-Minority	0.321-2.58 months	192	192	133	100.0	69.4	69.4	100.0	69.4	69.4
133	Marine Corps	Male	O4-O6	Non-Minority	2.59-4.86 months	200	199	121	99.5	60.7	60.4	99.5	60.7	60.4
134	Marine Corps	Male	O4-O6	Minority	0.321-2.58 months	28	28	15	100.0	53.6	53.6	100.0	53.6	53.6
135	Marine Corps	Male	O4-O6	Minority	2.59-4.86 months	18	18	12	100.0	66.7	66.7	100.0	66.7	66.7
136	Marine Corps	Female	E1-E3	Non-Minority	0.321-2.58 months	168	150	50	89.3	33.3	29.8	89.3	33.3	29.8
137	Marine Corps	Female	E1-E3	Non-Minority	2.59-4.86 months	365	351	96	96.2	27.4	26.3	96.2	27.4	26.3
138	Marine Corps	Female	E1-E3	Minority	0.321-2.58 months	124	111	29	89.5	26.1	23.4	89.5	26.1	23.4
139	Marine Corps	Female	E1-E3	Minority	2.59-4.86 months	347	331	73	95.4	22.1	21.0	95.4	22.1	21.0
140	Marine Corps	Female	E4	Non-Minority	0.321-2.58 months	76	74	21	97.4	28.4	27.6	97.4	28.4	27.6

Table B-4. (continued)

									Unweighted			Weighted		
Stratum	Service	Gender	Paygrade Group	Race/ Ethnicity	PERSTEMPO	Eligible Sample	Locatable Sample	Complete Respondents	Location Rate	Completion Rate	Response Rate	Location Rate	Completion Rate	Response Rate
141	Marine Corps	Female	E4	Non-Minority	2.59-4.86 months	305	302	87	99.0%	28.8%	28.5%	99.0%	28.8%	28.5%
142	Marine Corps	Female	E4	Minority	0.321-2.58 months	70	66	14	94.3	21.2	20.0	94.3	21.2	20.0
143	Marine Corps	Female	E4	Minority	2.59-4.86 months	352	343	80	97.4	23.3	22.7	97.4	23.3	22.7
144	Marine Corps	Female	E5-E6	Non-Minority	0.321-2.58 months	105	104	40	99.0	38.5	38.1	99.0	38.5	38.1
145	Marine Corps	Female	E5-E6	Non-Minority	2.59-4.86 months	300	297	110	99.0	37.0	36.7	99.0	37.0	36.7
146	Marine Corps	Female	E5-E6	Minority	0.321-2.58 months	95	93	26	97.9	28.0	27.4	97.9	28.0	27.4
147	Marine Corps	Female	E5-E6	Minority	2.59-4.86 months	483	477	117	98.8	24.5	24.2	98.8	24.5	24.2
148	Marine Corps	Female	E7-E9	Non-Minority	0.321-2.58 months	75	74	37	98.7	50.0	49.3	98.7	50.0	49.3
149	Marine Corps	Female	E7-E9	Non-Minority	2.59-4.86 months	144	143	77	99.3	53.8	53.5	99.3	53.8	53.5
150	Marine Corps	Female	E7-E9	Minority	0.321-2.58 months	37	37	16	100.0	43.2	43.2	100.0	43.2	43.2
151	Marine Corps	Female	E7-E9	Minority	2.59-4.86 months	191	190	76	99.5	40.0	39.8	99.5	40.0	39.8
152	Marine Corps	Female	W1-W5	Non-Minority, Minority	0.321-2.58 months, 2.59-4.86 months	79	78	44	98.7	56.4	55.7	98.7	56.4	55.7
153	Marine Corps	Female	O1-O3	Non-Minority	0.321-2.58 months	286	284	146	99.3	51.4	51.0	99.3	51.4	51.0
154	Marine Corps	Female	O1-O3	Non-Minority, Minority	2.59-4.86 months	52	52	24	100.0	46.2	46.2	100.0	46.2	46.2
155	Marine Corps	Female	O1-O3	Minority	0.321-2.58 months	113	111	65	98.2	58.6	57.5	98.2	58.6	57.5
156	Marine Corps	Female	O4-O6	Non-Minority, Minority	0.321-2.58 months, 2.59-4.86 months	110	110	66	100.0	60.0	60.0	100.0	60.0	60.0

Table B-4. (continued)

									Unweighted			Weighted		
Stratum	Service	Gender	Paygrade Group	Race/ Ethnicity	PERSTEMPO	Eligible Sample	Locatable Sample	Complete Respondents	Location Rate	Completion Rate	Response Rate	Location Rate	Completion Rate	Response Rate
157	Air Force	Male	E1-E3	Non-Minority	0.321-2.58 months	143	133	42	93.0%	31.6%	29.4%	93.0%	31.6%	29.4%
158	Air Force	Male	E1-E3	Non-Minority	2.59-4.86 months	414	411	139	99.3	33.8	33.6	99.3	33.8	33.6
159	Air Force	Male	E1-E3	Minority	0.321-2.58 months	624	586	147	93.9	25.1	23.6	93.9	25.1	23.6
160	Air Force	Male	E1-E3	Minority	2.59-4.86 months	988	986	225	99.8	22.8	22.8	99.8	22.8	22.8
161	Air Force	Male	E4	Non-Minority	0.321-2.58 months	77	77	26	100.0	33.8	33.8	100.0	33.8	33.8
162	Air Force	Male	E4	Non-Minority	2.59-4.86 months	405	401	139	99.0	34.7	34.3	99.0	34.7	34.3
163	Air Force	Male	E4	Minority	0.321-2.58 months	243	239	53	98.4	22.2	21.8	98.4	22.2	21.8
164	Air Force	Male	E4	Minority	2.59-4.86 months	869	859	193	98.9	22.5	22.2	98.9	22.5	22.2
165	Air Force	Male	E5-E6	Non-Minority	0.321-2.58 months	230	226	99	98.3	43.8	43.0	98.3	43.8	43.0
166	Air Force	Male	E5-E6	Non-Minority	2.59-4.86 months	835	834	356	99.9	42.7	42.6	99.9	42.7	42.6
167	Air Force	Male	E5-E6	Minority	0.321-2.58 months	531	528	184	99.4	34.8	34.7	99.4	34.8	34.7
168	Air Force	Male	E5-E6	Minority	2.59-4.86 months	1,224	1,217	460	99.4	37.8	37.6	99.4	37.8	37.6
169	Air Force	Male	E7-E9	Non-Minority	0.321-2.58 months	70	69	44	98.6	63.8	62.9	98.6	63.8	62.9
170	Air Force	Male	E7-E9	Non-Minority	2.59-4.86 months	233	233	133	100.0	57.1	57.1	100.0	57.1	57.1
171	Air Force	Male	E7-E9	Minority	0.321-2.58 months	172	172	84	100.0	48.8	48.8	100.0	48.8	48.8
172	Air Force	Male	E7-E9	Minority	2.59-4.86 months	389	387	189	99.5	48.8	48.6	99.5	48.8	48.6
173	Air Force	Male	O1-O3	Non-Minority	0.321-2.58 months	353	351	199	99.4	56.7	56.4	99.4	56.7	56.4
174	Air Force	Male	O1-O3	Non-Minority	2.59-4.86 months	107	105	54	98.1	51.4	50.5	98.1	51.4	50.5

Table B-4. (continued)

									Unweighted			Weighted		
Stratum	Service	Gender	Paygrade Group	Race/ Ethnicity	PERSTEMPO	Eligible Sample	Locatable Sample	Complete Respondents	Location Rate	Completion Rate	Response Rate	Location Rate	Completion Rate	Response Rate
175	Air Force	Male	O1-O3	Minority	0.321-2.58 months	256	256	124	100.0%	48.4%	48.4%	100.0%	48.4%	48.4%
176	Air Force	Male	O1-O3	Minority	2.59-4.86 months	43	43	22	100.0	51.2	51.2	100.0	51.2	51.2
177	Air Force	Male	O4-O6	Non-Minority	0.321-2.58 months	296	293	195	99.0	66.6	65.9	99.0	66.6	65.9
178	Air Force	Male	O4-O6	Non-Minority	2.59-4.86 months	83	82	48	98.8	58.5	57.8	98.8	58.5	57.8
179	Air Force	Male	O4-O6	Minority	0.321-2.58 months	176	175	102	99.4	58.3	58.0	99.4	58.3	58.0
180	Air Force	Male	O4-O6	Minority	2.59-4.86 months	20	20	12	100.0	60.0	60.0	100.0	60.0	60.0
181	Air Force	Female	E1-E3	Non-Minority	0.321-2.58 months	452	435	190	96.2	43.7	42.0	96.2	43.7	42.0
182	Air Force	Female	E1-E3	Non-Minority	2.59-4.86 months	403	401	161	99.5	40.1	40.0	99.5	40.1	40.0
183	Air Force	Female	E1-E3	Minority	0.321-2.58 months	360	354	97	98.3	27.4	26.9	98.3	27.4	26.9
184	Air Force	Female	E1-E3	Minority	2.59-4.86 months	316	314	100	99.4	31.8	31.6	99.4	31.8	31.6
185	Air Force	Female	E4	Non-Minority	0.321-2.58 months	375	374	144	99.7	38.5	38.4	99.7	38.5	38.4
186	Air Force	Female	E4	Non-Minority	2.59-4.86 months	325	325	113	100.0	34.8	34.8	100.0	34.8	34.8
187	Air Force	Female	E4	Minority	0.321-2.58 months	362	358	109	98.9	30.4	30.1	98.9	30.4	30.1
188	Air Force	Female	E4	Minority	2.59-4.86 months	278	277	68	99.6	24.5	24.5	99.6	24.5	24.5
189	Air Force	Female	E5-E6	Non-Minority	0.321-2.58 months	535	533	255	99.6	47.8	47.7	99.6	47.8	47.7
190	Air Force	Female	E5-E6	Non-Minority	2.59-4.86 months	389	388	200	99.7	51.5	51.4	99.7	51.5	51.4
191	Air Force	Female	E5-E6	Minority	0.321-2.58 months	494	494	189	100.0	38.3	38.3	100.0	38.3	38.3
192	Air Force	Female	E5-E6	Minority	2.59-4.86 months	333	332	125	99.7	37.7	37.5	99.7	37.7	37.5

Table B-4. (continued)

									Unweighted			Weighted		
Stratum	Service	Gender	Paygrade Group	Race/ Ethnicity	PERSTEMPO	Eligible Sample	Locatable Sample	Complete Respondents	Location Rate	Completion Rate	Response Rate	Location Rate	Completion Rate	Response Rate
193	Air Force	Female	E7-E9	Non-Minority	0.321-2.58 months	151	151	101	100.0%	66.9%	66.9%	100.0%	66.9%	66.9%
194	Air Force	Female	E7-E9	Non-Minority	2.59-4.86 months	118	117	68	99.2	57.9	57.4	99.2	57.9	57.4
195	Air Force	Female	E7-E9	Minority	0.321-2.58 months	128	128	61	100.0	47.7	47.7	100.0	47.7	47.7
196	Air Force	Female	E7-E9	Minority	2.59-4.86 months	81	81	40	100.0	49.3	49.3	100.0	49.3	49.3
197	Air Force	Female	O1-O3	Non-Minority	0.321-2.58 months	371	370	215	99.7	58.1	58.0	99.7	58.1	58.0
198	Air Force	Female	O1-O3	Non-Minority, Minority	2.59-4.86 months	31	31	18	100.0	58.1	58.1	100.0	58.1	58.1
199	Air Force	Female	O1-O3	Minority	0.321-2.58 months	147	147	70	100.0	47.6	47.6	100.0	47.6	47.6
200	Air Force	Female	O4-O6	Non-Minority	0.321-2.58 months	440	439	307	99.8	69.9	69.8	99.8	69.9	69.8
201	Air Force	Female	O4-O6	Non-Minority, Minority	2.59-4.86 months	11	11	7	100.0	63.6	63.6	100.0	63.6	63.6
202	Air Force	Female	O4-O6	Minority	0.321-2.58 months	123	121	67	98.4	55.4	54.5	98.4	55.4	54.5
203	Coast Guard	Male	E1-E3	Non-Minority	0.321-2.58 months	328	319	71	97.3	22.3	21.6	97.3	22.3	21.6
204	Coast Guard	Male	E1-E3	Non-Minority	2.59-4.86 months	123	118	24	95.9	20.3	19.5	95.9	20.3	19.5
205	Coast Guard	Male	E1-E3	Minority	0.321-2.58 months	58	56	14	96.6	25.0	24.1	96.6	25.0	24.1
206	Coast Guard	Male	E1-E3	Minority	2.59-4.86 months	27	27	8	100.0	29.6	29.6	100.0	29.6	29.6
207	Coast Guard	Male	E4	Non-Minority	0.321-2.58 months	33	33	9	100.0	27.3	27.3	100.0	27.3	27.3
208	Coast Guard	Male	E4	Non-Minority	2.59-4.86 months	304	301	90	99.0	29.9	29.6	99.0	29.9	29.6
209	Coast Guard	Male	E4	Minority	0.321-2.58 months	15	15	5	100.0	33.3	33.3	100.0	33.3	33.3

Table B-4. (continued)

									Unweighted			Weighted		
Stratum	Service	Gender	Paygrade Group	Race/ Ethnicity	PERSTEMPO	Eligible Sample	Locatable Sample	Complete Respondents	Location Rate	Completion Rate	Response Rate	Location Rate	Completion Rate	Response Rate
210	Coast Guard	Male	E4	Minority	2.59-4.86 months	67	66	22	98.5%	33.3%	32.8%	98.5%	33.3%	32.8%
211	Coast Guard	Male	E5-E6	Non-Minority	0.321-2.58 months	48	48	24	100.0	50.0	50.0	100.0	50.0	50.0
212	Coast Guard	Male	E5-E6	Non-Minority	2.59-4.86 months	307	307	139	100.0	45.3	45.3	100.0	45.3	45.3
213	Coast Guard	Male	E5-E6	Minority	0.321-2.58 months	19	19	6	100.0	31.6	31.6	100.0	31.6	31.6
214	Coast Guard	Male	E5-E6	Minority	2.59-4.86 months	75	75	24	100.0	32.0	32.0	100.0	32.0	32.0
215	Coast Guard	Male	E7-E9	Non-Minority	0.321-2.58 months	17	17	9	100.0	52.9	52.9	100.0	52.9	52.9
216	Coast Guard	Male	E7-E9	Non-Minority	2.59-4.86 months	105	105	60	100.0	57.0	57.0	100.0	57.0	57.0
217	Coast Guard	Male	E7-E9	Minority	0.321-2.58 months	5	5	3	100.0	60.0	60.0	100.0	60.0	60.0
218	Coast Guard	Male	E7-E9	Minority	2.59-4.86 months	18	18	11	100.0	61.1	61.1	100.0	61.1	61.1
219	Coast Guard	Male	W1-W5	Non-Minority	0.321-2.58 months	76	76	50	100.0	65.8	65.8	100.0	65.8	65.8
220	Coast Guard	Male	W1-W5	Non-Minority	2.59-4.86 months	26	26	15	100.0	57.7	57.7	100.0	57.7	57.7
221	Coast Guard	Male	W1-W5	Minority	0.321-2.58 months, 2.59-4.86 months	16	16	9	100.0	56.3	56.3	100.0	56.3	56.3
222	Coast Guard	Male	O1-O3	Non-Minority	0.321-2.58 months	100	100	66	100.0	66.0	66.0	100.0	66.0	66.0
223	Coast Guard	Male	O1-O3	Non-Minority	2.59-4.86 months	68	68	43	100.0	63.2	63.2	100.0	63.2	63.2
224	Coast Guard	Male	O1-O3	Minority	0.321-2.58 months	21	21	11	100.0	52.4	52.4	100.0	52.4	52.4
225	Coast Guard	Male	O1-O3	Minority	2.59-4.86 months	12	11	8	91.7	72.7	66.7	91.7	72.7	66.7
226	Coast Guard	Male	O4-O6	Non-Minority	0.321-2.58 months	82	82	66	100.0	80.5	80.5	100.0	80.5	80.5

Table B-4. (continued)

									Unweighted			Weighted		
Stratum	Service	Gender	Paygrade Group	Race/ Ethnicity	PERSTEMPO	Eligible Sample	Locatable Sample	Complete Respondents	Location Rate	Completion Rate	Response Rate	Location Rate	Completion Rate	Response Rate
227	Coast Guard	Male	O4-O6	Non-Minority	2.59-4.86 months	56	56	39	100.0%	70.2%	70.2%	100.0%	70.2%	70.2%
228	Coast Guard	Male	O4-O6	Minority	0.321-2.58 months	7	7	2	100.0	28.6	28.6	100.0	28.6	28.6
229	Coast Guard	Male	O4-O6	Minority	2.59-4.86 months	5	5	5	100.0	100.0	100.0	100.0	100.0	100.0
230	Coast Guard	Female	E1-E3	Non-Minority	0.321-2.58 months	271	267	110	98.5	41.2	40.6	98.5	41.2	40.6
231	Coast Guard	Female	E1-E3	Non-Minority, Minority	2.59-4.86 months	74	72	21	97.3	29.2	28.4	97.3	29.2	28.4
232	Coast Guard	Female	E1-E3	Minority	0.321-2.58 months	62	59	22	95.2	37.3	35.5	95.2	37.3	35.5
233	Coast Guard	Female	E4	Non-Minority	0.321-2.58 months	104	104	43	100.0	41.3	41.3	100.0	41.3	41.3
234	Coast Guard	Female	E4	Non-Minority	2.59-4.86 months	182	181	72	99.5	39.8	39.6	99.5	39.8	39.6
235	Coast Guard	Female	E4	Minority	0.321-2.58 months	49	49	10	100.0	20.4	20.4	100.0	20.4	20.4
236	Coast Guard	Female	E4	Minority	2.59-4.86 months	58	58	24	100.0	41.4	41.4	100.0	41.4	41.4
237	Coast Guard	Female	E5-E6	Non-Minority	0.321-2.58 months	153	152	68	99.3	44.7	44.4	99.3	44.7	44.4
238	Coast Guard	Female	E5-E6	Non-Minority	2.59-4.86 months	181	181	87	100.0	48.1	48.1	100.0	48.1	48.1
239	Coast Guard	Female	E5-E6	Minority	0.321-2.58 months	90	90	32	100.0	35.6	35.6	100.0	35.6	35.6
240	Coast Guard	Female	E5-E6	Minority	2.59-4.86 months	86	86	29	100.0	33.7	33.7	100.0	33.7	33.7
241	Coast Guard	Female	E7-E9	Non-Minority, Minority	0.321-2.58 months	53	53	25	100.0	47.2	47.2	100.0	47.2	47.2
242	Coast Guard	Female	E7-E9	Non-Minority, Minority	2.59-4.86 months	50	50	34	100.0	68.0	68.0	100.0	68.0	68.0

Table B-4. (continued)

									Unweighted			Weighted		
Stratum	Service	Gender	Paygrade Group	Race/ Ethnicity	PERSTEMPO	Eligible Sample	Locatable Sample	Complete Respondents	Location Rate	Completion Rate	Response Rate	Location Rate	Completion Rate	Response Rate
243	Coast Guard	Female	W1-W5	Non-Minority, Minority	0.321-2.58 months, 2.59-4.86 months	32	32	24	100.0%	75.0%	75.0%	100.0%	75.0%	75.0%
244	Coast Guard	Female	O1-O3	Non-Minority	0.321-2.58 months	117	116	82	99.1	70.7	70.1	99.1	70.7	70.1
245	Coast Guard	Female	O1-O3	Non-Minority	2.59-4.86 months	54	54	38	100.0	70.4	70.4	100.0	70.4	70.4
246	Coast Guard	Female	O1-O3	Minority	0.321-2.58 months, 2.59-4.86 months	54	54	32	100.0	59.3	59.3	100.0	59.3	59.3
247	Coast Guard	Female	O4-O6	Non-Minority, Minority	0.321-2.58 months	44	44	32	100.0	72.7	72.7	100.0	72.7	72.7
248	Coast Guard	Female	O4-O6	Non-Minority, Minority	2.59-4.86 months	25	25	19	100.0	76.0	76.0	100.0	76.0	76.0
249	All	All, Unknown	All, Unknown	All, Unknown	All, Unknown	445	433	190	97.3	43.9	42.7	97.3	43.9	42.7

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14. ABSTRACT

The 2002 Status of the Armed Forces Survey – Workplace and Gender Relations gathered information on issues concerning workplace and gender relations. This report describes the survey sampling design, sample selection, missing data compensation procedures, and estimation. The first section of Statistical Methodology Report presents a general overview of the survey and the sampling design. The second section provides information on the statistical methods used in weighting, response rate calculations, and variance estimation.

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